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The importance of income-tested benefits in good times and bad: lessons from EU countries

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The importance of income-tested benefits in good times and bad: lessons from EU countries[1]

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Abstract

Policy over the past years has seen a gradual movement away from universal social benefits towards the provision of more targeted benefit schemes. Using the European tax-benefit microsimulation model EUROMOD, this paper aims to compare the effectiveness of income-tested benefits at different points in the economic cycle. This objective is considered in terms of coverage of households with incomes falling below various thresholds and importance in terms of the fraction of total resources that these benefits provide. The prevalence and relative weight of income-tested benefits throughout the income distribution is also examined. We compare the situation in 2009 with that in 2014 (or 2013) for fifteen EU Member States experiencing differing economic conditions over the period in question, including those which have been affected comparatively little by the crisis as well as those which have witnessed severe reductions in economic activity and employment levels and those in strong recovery by 2014. As EU-SILC micro-data containing household income for 2013 or 2014 are not available yet, standard EUROMOD routines are enhanced with additional adjustments to the EU-SILC based input data in order to take into account changes in the labour market. We attempt to indicate the sensitivity of the estimated policy effectiveness indicators to these particular changes. We conclude by discussing the methodological pitfalls and main findings of this research

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Introduction

Policy over recent decades has seen a movement away from universal provision of social benefits towards more reliance on income-targeted benefit schemes. Faced with increasingly tight fiscal constraints or changing ideological paradigms, many European countries have tilted in favour of more targeting (Mkandawire, 2005). This shift was initially supported by the Word Bank (1990) and, more recently, also advocated by the European Commission (2013) and the OECD (2011; 2013). In its 2013 report on the design and implementation of means testing for social protection, the OECD assesses the advantages and disadvantages of means testing social protection programmes and concludes that "the benefits of means testing are significant and can be expected to outweigh the advantages of universal benefits". At the same time, the focus of these benefit schemes has also been extended. Means-tested benefits are no longer solely aimed at people not in work, but also at those involved in low-paid activities (Marx et al., 2013). Considering the most well-known disadvantages of income-testing in terms of targeting errors and incomplete benefit take-up[2], these developments raise questions about the effectiveness of such benefits in reaching the people who need them most; those with the lowest incomes who are at risk of income poverty or material deprivation (Notten, 2015).

The broader rationale for income-testing also goes beyond targeting only those at the bottom of the income distribution. Benefit schemes that adhere to the notion of "progressive universalism" exist in a number of EU countries (MISSOC, 2013). These schemes set lower benefit amounts for higher income groups without necessarily excluding them from benefit receipt. Such benefit schemes emerged partly as a response to the criticisms about the perverse behavioural incentives of harsh means-testing (Bradshaw, 2012), as a way to reduce stigma (Sen, 1995) and increase the support of the middle class towards income-tested benefits (Korpi and Palme, 1998).

Given the widening scope and focus of income-tested benefits, the distinction between income testing for targeting the poor and excluding the rich becomes less clear cut. Defining minimum income packages in a comparable way in different country settings becomes challenging (see, for example, Figari et al., 2013). Hence, considering income-tested benefit schemes as a whole can provide a more comprehensive and less arbitrary assessment of their performance in comparative perspective.

In this paper the analysis focuses on income-tested benefits targeted at the working-age population, leaving aside income-tested pensions and pension supplements. Income-tested elements of other policy instruments (such as within the income tax system) are also outside the scope of this research[3]. Our definition of income-testing includes all benefits whose entitlement is made conditional upon the beneficiaries' income or whose amount is inversely related to the latter.

The aim of this paper is to compare the effectiveness of such income-tested benefit packages at different points in the economic cycle. The main dimensions of effectiveness that we consider are coverage of people at-risk-of-poverty and benefit salience, measured in terms of the fraction of households' total monetary resources that income-tested benefits comprise. Using the European tax-benefit microsimulation model EUROMOD we compare the situation in 2009 with that in 2014 or 2013, two years for which actual micro data are not yet available. The comparison is done for fifteen EU Member States experiencing differing economic conditions over the period in question, including

[2] A review of the main advantages and disadvantages of means-testing and universalism can be found in Gugushvili and Hirsch (2014).

[3] Some elements of income tax, such as refundable tax credits, are analogous to cash benefits. However, there are other, potentially income-tested, elements such as allowances or specific reliefs that complicate the picture. It would in practice be difficult to distinguish the cash value of the income tax components of interest since income tax is by its nature itself income-tested.

those which have been affected comparatively little by the crisis as well as those which have witnessed severe reductions in economic activity and employment levels and those in strong recovery by 2014. The countries included in the analysis are Germany, Estonia, France, Greece, Spain, Italy, Cyprus, Latvia, Lithuania, Austria, Poland, Portugal, Romania, Slovakia and Finland.

An important novelty of this research is that the use of microsimulation techniques allows us to disentangle how much of the change in performance of income-tested benefits during this period is due to policy reforms and the evolution of underlying market incomes, and how much is due to developments in the labour market of each of the countries in question (i.e. changes in employment and unemployment rates). The latter closely relates to the idea of income-tested benefits acting as automatic stabilisers, mitigating the impact of unemployment shocks on household income (Dolls et al., 2012).

The paper is structured as follows. Section 2 explains the methodology of our work. Section 3 explains the way that countries have been classified in different categories, according to their underlying economic conditions. Section 4 presents our estimates on the effectiveness of income-tested benefits at different points in the economic cycle. Section 5 concludes by summarising the most important findings, and by reflecting on the policy implications of this research.

Methodology and data

A simple way to compare the incidence and prevalence of income-tested benefit (ITB) receipt through time would be to analyse detailed household micro-data for each country in each period. If such micro-data identifying ITB receipt and measuring household incomes were available this would allow us to draw conclusions about incidence and importance to household incomes at the two points in time[4]. It would also allow us to make some general inferences about the drivers of any change but we could not distinguish between the effects of policy reforms and the effects of other changes except in very general terms e.g. using shift-share analysis.

In this paper we make use of a single micro dataset from the start of the period together with microsimulation techniques. We use the microsimulation model EUROMOD for three purposes: (i) to identify ITBs when detailed data on receipt of these benefits are not available in micro-data; (ii) to disentangle the changes in size and focus of ITB packages due to differences in policies and market incomes, and due to developments in the labour market, and (iii) to analyse the most recent policy and labour market changes not yet covered by available household income micro-data.

EUROMOD estimates in a comparable manner the effects of taxes and benefits on the income distribution in each of the EU Member States. The model uses micro-data on gross incomes, labour market status and other characteristics of the individuals and households, which it then applies to the tax and benefit rules in place in order to simulate direct taxes, social insurance contributions and entitlements to cash benefits. The components of the tax-benefit system that cannot be simulated are read off the original data. EUROMOD has been validated both at micro and macro level and has been tested in many applications. For a comprehensive overview, see Sutherland and Figari (2013).

The underlying micro-data for all countries are drawn from the European Union Statistics on Income and Living Conditions (EU-SILC) data. Note that detailed data on ITB receipt are not available for most EU countries. The EU-SILC micro-data provided by Eurostat aggregate benefit payments by

[4] However, such detailed and timely data are usually not available. Due to the complexity of income data collection, relevant income data only become available after considerable (i.e. 2-3 year) delay.

function and both income-tested and universal benefits may be combined together in single variables. In this study we use EUROMOD to simulate entitlements to these and other benefits, allowing us to classify them by whether they are income-tested or not[5]. Simulations are carried out on the basis of the tax-benefit rules in place on June 30th of each policy year.

In this analysis, we include all income-tested benefits for working age individuals (and their children). This is partly driven by the difficulty in distinguishing between minimum income schemes and other income-tested benefits and the arbitrariness of any single definition when used in comparative perspective, and partly by our interest in measuring the prevalence of income-testing itself, and its reach up the income distribution. Another reason for focusing on all ITBs rather than on income-tested social assistance alone is that recipients of the latter are often also eligible to receive other means-tested benefits, such as education or family allowances. Appendix 1 lists the benefits included in our definition of "income-tested" for non-elderly people and presents some descriptive statistics for 2009 and 2013/14. The policy reforms that took place in some countries in the period considered are documented too (Tables A1.1 - A1.15). Income-tested pensions and ITBs targeted at old-age pension recipients or people over 65 (such as supplements to low contributory pensions) fall outside the scope of our analysis due to our focus on the working age population and also because it is difficult in some countries to identify the income-tested element of pensions when they are integrated in a single payment. The prevalence of elderly people and children across the income distribution in 2009 is depicted in Appendix 2 (Tables A2.1 - A2.2).

Table 1 summarises the types of ITBs for the non-elderly population that exist in the 15 countries examined and the way that these are treated in EUROMOD. The available information in EU-SILC usually allows us to simulate policies in a detailed and accurate way. Appendix 1 provides information for cases where it has not been possible to simulate all eligibility conditions for benefit receipt or for cases where a benefit is only part-simulated (i.e. eligibility is indicated by receipt in the data and benefit amounts are calculated according to the rules). There are two countries where income-tested social assistance benefits are not simulated at all: Spain and Italy. This is mostly because of the existence of a large number of regionally or locally differentiated (rather than national) policies. Hence, any policy changes related to these benefits that took place between 2009 and 2013/14 in these countries have not been taken into account, and the results for Spain and Italy should be interpreted with this in mind.

In order to isolate the effects of policy reforms we calculate the effects of two different policy regimes on the population coming from a single dataset, namely EU-SILC 2010 (2009 incomes). We compare policies from 2009 with those in 2014 (or 2013)[6]. For the latter we update market incomes from 2009 to 2013/14 using factors based on the available administrative or survey statistics. Specific updating factors are derived for each income source, reflecting the change in their average amount between the income data reference period and the target year, and thus capturing the effects of differential income growth on ITB entitlement. The combination of microsimulation techniques with the use of a single dataset also allows us to focus on the effects of changes in labour market characteristics, disentangling

[5] It should be noted, however, that it is not possible to simulate entitlements to all benefits. Appendix 1 identifies which are simulated and which are not. In the case of non-simulated ITBs their levels are uprated according to actual practice 2009-2013/14 but other reforms are not taken into account.

[6] Simulations are available up to 2014 for nine of the countries considered (Germany, Estonia, Greece, Italy, Latvia, Austria, Poland, Romania and Slovakia) and up to 2013 for the remainder. This explains the different end points in the periods examined.

them from all the other changes to household characteristics that took place during this volatile period[7].

TABLE 1. TYPES OF INCOME-TESTED BENEFITS AND TREATMENT IN EUROMOD

	Family	Social assistance	Housing	Unemployment	Survivors	Disability	Education
Germany	✓	✓	✓	✓	-	-	✓
Estonia	✓	✓ (NTU)	-	-	-	-	-
Greece	✓	✓ (NTU)	✓ (NS)	✓(NTU)	-	-	✓
Spain	✓	✓ (NS)	✓ (NS)	✓	-	-	✓(NS)
France	✓	✓ (NTU)	✓	✓	✓	-	✓(NS)
Italy	✓	✓ (NS)	✓ (NS)	-	-	-	✓(NS)
Cyprus	✓	✓	✓ (NS)	-	-	-	✓
Latvia	-	✓	✓	-	-	-	-
Lithuania	✓	✓	✓ (NS)	-	-	-	-
Austria	✓	✓	✓ (NS)	✓	-	-	✓(NS)
Poland	✓	✓ (NTU)	✓	-	-	✓	✓
Portugal	✓	✓	✓ (NS)	✓	-	-	-
Romania	✓	✓	✓	-	-	-	✓(NS)
Slovakia	-	✓	-	-	-	-	-
Finland	✓	✓ (NTU)	✓ (NS)	✓	-	-	✓

Notes: "NTU" denotes that adjustments for benefit non take-up are undertaken in EUROMOD.
"NS" denotes that the benefits are not simulated in EUROMOD (i.e. they are read off the EU-SILC data). For more information about the treatment of benefits in EUROMOD (i.e. part-simulation vs full simulation) see Appendix 2.

Source: EUROMOD Country Reports (policy years: 2009 and 2013/14).

We approximate the changes in employment and unemployment that took place between 2009 and 2013/14, adopting the same method that is applied when "nowcasting" the income distribution (Rastrigina et al., 2015; Navicke et al., 2014). This uses estimates of the net change in employment by characteristics taken from Eurostat Labour Force Survey (LFS) statistics over the period to inform the simulation of selected people in the EU-SILC changing their labour market status. EUROMOD then calculates the implications of these transitions for household income e.g. of becoming unemployed. To the extent that the newly unemployed might qualify for ITBs (or the newly employed might cease to qualify, or qualify for different benefits) this is captured by the EUROMOD tax-benefit calculations. As far as market incomes are concerned, employment and self-employment income is set to zero for individuals moving from employment into unemployment; for individuals moving from unemployment into employment, earnings are set equal to the mean among those already employed with the same characteristics.

More formally, we construct the following baseline (BL) and counterfactual (CF) scenarios:

- **BL:** policies as in 2009, market incomes as in 2009, no labour market adjustments (i.e. labour market status as in 2009);

[7] If we had access to two datasets for the end as well as the start period we would be able to perform a full decomposition analysis covering not only labour market changes but also other population effects. Using currently available data such analysis, however, would not cover the most recent developments. For more information about this methodology, see Figari et al. (2013) and Paulus and Tasseva (2015).

- **CF1:** policies as in 2009, market incomes as in 2009, with labour market adjustments (i.e. labour market status as in 2013/14);

- **CF2:** policies as in 2013/14, market incomes as in 2013/14, no labour market adjustments (i.e. labour market status as in 2009);

- **CF3:** policies as in 2013/14, market incomes as in 2013/14, with labour market adjustments (i.e. labour market status as in 2013/14).

The comparison between Counterfactual 1 and the Baseline is capturing the effects of changes in employment and unemployment on the 2009 ITBs; the comparison between Counterfactual 2 and the Baseline is capturing the effects of policy reforms as well as changes in levels of benefit payment relative to market incomes, assuming that individuals' labour market status has remained unchanged; the comparison between Counterfactual 3 and Counterfactual 2 is capturing the effects of labour market changes on the 2013/14 policies; finally, the comparison between Counterfactual 3 and the Baseline is capturing the combined effect of changes in policies, market incomes and labour market conditions on ITB receipt. Note that in all the scenarios, the underlying population characteristics (i.e. age structure, family structure, household size etc.) remain unchanged, i.e. as depicted in EU-SILC 2010.

In order to enhance the accuracy and credibility of our simulations, an effort was made to address the issue of benefit non take-up in countries where the non-take up is substantial and the information needed to model it is available. Such adjustments were implemented in the case of income-tested social/unemployment assistance benefits in Estonia, Greece, France, Poland and Finland. These modelling modifications were needed in order to bring simulations closer to the official statistics in cases where it is well established that individuals fail to receive ITBs for which they are actually eligible. Note that the take-up treatment remains stable across policy scenarios, ensuring that changes in ITB receipt are not driven by changes in this assumption. More detailed information about each of the adjustments can be found in Appendix 1 and in the EUROMOD Country Reports (see https://www.iser.essex.ac.uk/euromod/using-euromod/country-reports/). The latter also provide information on the numbers of benefit recipients and aggregate expenditure from administrative sources, whenever these are available[8].

Our analysis is in terms of household disposable income, since this is the official measuring stick that is applied when assessing risk of income poverty in the EU as well as standard practice when constructing the income distribution in general (e.g. income deciles). Accordingly, all members of households are considered to be "in receipt" of ITBs if the common household income includes such components[9]. By doing so, we assume that financial resources are shared among all household members even if elements of them are intended for narrower assessment units. Appendix 2 provides information on the unweighted sample size of people in households in receipt of ITBs in the baseline and in our simulated counterfactual scenario CF3 for 2013/14 (Table A2.4).

[8] Tax evasion adjustments were also implemented in two countries where this phenomenon is known to be rife: Greece and Italy. Detailed information about how this issue is treated in EUROMOD can be found in Jara and Leventi (2014).

[9] Thus if ITBs are assessed on the basis of the narrow family unit's income and circumstances, people in multi-assessment unit households may be attributed as receiving ITBs when in fact the benefits in question are not directly intended for them. The percentage of the population living in multi-unit households varies widely across the 15 countries examined in this work: from a bit less than 20 per cent in Finland, Germany and France to almost 50 per cent in Poland, Latvia, Romania and Slovakia. In the remaining eight countries the percentage lies between 30 and 40 percent (See Table A2.3 in Appendix 2). The issue of the mismatch between the unit used for ITB assessment and the unit assumed to be sharing incomes for poverty measurement is discussed in Figari et al. (2013).

The economic context

In the analysis that follows we classify the countries that we focus on into three groups based on a number of indicators and their economic trajectory over the period 2009-2013/14. This is shown in Table 2.

In Group A there are seven countries classified as being in strong recovery or continuing growth, based on GDP. They are Estonia, Poland, Lithuania, Latvia, Slovakia, Germany and Romania[10]. These countries are also characterised by pronounced nominal growth in average employment income and median household income (somewhat lower in Lithuania), rising employment (very modest in Slovakia) and falling unemployment (except Slovakia and Poland) and, as is often the case when median income is growing fast, increases in risk of poverty if the threshold moves with the median (except Latvia and Romania).

In contrast, Group B consists of five southern European countries (Italy, Spain, Portugal, Cyprus and Greece) where GDP has been falling. Real median household income and (except for Italy) real employment income are falling too, along with falling employment and rising unemployment. In these countries, risk of poverty using a threshold anchored in 2009 is rising substantially, especially in Greece.

Group C contains three countries with a relatively stable economic situation on average over the period (Austria, France and Finland). Modest growth in GDP accompanies little labour market change but falling real household incomes, which results in rising risk of poverty using a threshold anchored in 2009.

Against this diversity of economic experience and trends it is not straightforward to anticipate what one might expect in terms of changes in incidence and effectiveness of ITBs over the period across the different groups. Economic decline is likely to increase the need for ITBs but may be accompanied by austerity which might in turn mean cuts in all benefits (reducing ITBs) or increases in the use of ITBs relative to more expensive universal benefits. Conversely, strong growth might reduce the need for ITBs but also make more generous benefits more affordable. Furthermore, governments may take a deliberately counter-cyclical approach. Hence, no a priori hypotheses can be made for any of these groups with regard to the evolution of the effectiveness of ITBs during this volatile period. Empirical analysis may reveal which of the above-mentioned trends prevail in each particular case.

[10] It should be noted that here and in the rest of the table we are comparing the situation at the start of the period with that at the end. Trajectories in the middle may be very variable.

Table 2: Changes in the main indicators (2009 - 2013/2014)

Country	GDP	HICP	Average employment income		Median household disposable income		Employment rate	Unemployment rate	At-risk-of-poverty	
	in constant prices		nominal	real	nominal	real	15-64	15-64	floating poverty line	anchored poverty line (in 2009)
	change in %						*change in percentage points*			
A. Growth/recovery										
EE	20.3	16.7	29.4	10.8	26.5	8.3	5.3	-6.0	2.0	-2.1
PL	16.1	11.5	23.3	10.5	21.8	9.2	1.9	1.1	0.6	-2.9
LT	15.6	10.0	10.1	0.1	5.3	-4.3	3.8	-2.0	0.7	3.2
LV	14.3	6.0	22.0	15.0	15.6	9.0	5.7	-6.7	-0.5	-4.0
SK	13.6	10.2	16.0	5.3	8.9	-1.2	0.3	1.3	1.4	3.8
DE	10.0	8.4	10.9	2.3	12.2	3.5	3.4	-2.8	1.5	1.3
RO	7.4	21.4	27.5	5.0	21.7	0.2	2.1	-0.1	-0.5	-0.5
B. Decline										
IT	-2.4	9.7	12.2	2.3	3.9	-5.3	-1.9	4.9	1.0	7.6
ES	-3.9	9.4	4.9	-4.0	-3.9	-12.1	-5.2	8.2	0.2	3.4
PT	-4.6	8.4	5.7	-2.5	-6.3	-13.6	-5.5	7.0	-2.9	2.2
CY	-6.1	9.9	7.7	-1.9	-3.5	-12.2	-7.3	10.6	-0.1	6.7
EL	-21.9	6.6	-14.4	-19.8	-30.0	-34.3	-11.7	17.0	1.2	23.4
C. Stability										
AT	6.4	11.9	8.5	-3.0	5.9	-5.4	0.9	0.1	0.7	3.4
FR	4.7	7.4	9.1	1.6	4.8	-2.4	0.1	0.8	1.0	2.8
FI	2.8	10.8	12.0	1.1	9.6	-1.1	0.2	-0.1	-0.2	1.2

Notes: LT, ES, PT, CY, FR, FI (in blue) - up to 2013, all other countries (in black) up to 2014. Countries are sorted within group by change in GDP.

Sources: GDP - Annual macro-economic database of DG ECFIN AMECO; HICP, employment and unemployment rates - Eurostat; average employment income, median household disposable income, at-risk-of-poverty rate - Nowcasts based on EUROMOD Version G2.34.

Results

What was the share of ITB expenditure in 2009 in the 15 EU countries in question? How many people were living in households in receipt of some ITB income? How much have these shares been affected by the policy reforms and the changes in employment and unemployment rates that took place between 2009 and 2013/14? How have these benefits affected households at different parts of the income distribution during this period? The following sections attempt to shed light on these important issues.

1.1 The prevalence of income-tested benefits

Table 3 shows how the share of ITB expenditure in all non-pension cash benefit expenditure (as estimated by EUROMOD) varies across the countries and at the two points in time[11]. In 2009 the share ranges from 3 per cent in Estonia and 8 per cent in Latvia to 46 and 50 per cent in Finland and Portugal respectively.

Table 3. Expenditure on ITB as a proportion of all benefits, 2009 and 2013/2014

Country	ITB (% of all benefits)	
	2009 (BL)	2013/14 (CF3)
A. Growth/recovery		
EE	3	3
PL	39	40
LT	28	20
LV	8	7
SK	25	29
DE	43	41
RO	42	33
B. Decline		
IT	31	30
ES	40	52
PT	50	53
CY	38	51
EL	40	66
C. Stability		
AT	27	31
FR	42	43
FI	46	44

Notes: 1. BL: policies as in 2009, market incomes as in 2009, labour market conditions as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.
2. LT, ES, PT, CY, FR, FI (in blue) – up to 2013; all other countries (in black) – up to 2014.

[11] Note that ITBs that are targeted at the elderly (such as income-tested pensions and pension supplements) are not included in the analysis.

3. Total benefit expenditure does not include pensions.
4. The percentage of simulated ITB expenditure can be found in Appendix 2 (Table A2.5).

Source: EUROMOD Version G2.34.

There is no particular pattern in this prevalence across country groups (nor would one expect there to be). In most countries where the share changes substantially in 2013/14, this is an increase. This effect is particularly strong in Group B (with the exception of Italy) where the share rises from 40 to 66 per cent in Greece, from 38 to 51 per cent in Cyprus and from 40 to 52 per cent in Spain. In the growth/recovery country group A the share of ITBs dropped substantially in Lithuania and Romania.

Table 4 shows the population share living in households that are in receipt of some ITB income. The lowest shares are again in Estonia and Latvia (2 and 7 per cent respectively). More than half of the population in 2009 is in households receiving ITBs in several countries, again scattered across the three groups: Romania, Portugal, France and Finland.

In four countries two sets of results are shown in Table 4. These correspond to cases where entirely new ITBs were introduced, or others were abolished in the period. One set of results shows the changes in prevalence for a subset of income-tested benefits that applied *both* in 2009 and 2013/14 *(EE_comp, PL_comp, CY_comp* and *EL_comp*). The other set shows the results for the ITBs that existed in each of the years that we consider. This way we can see if the changes in the share of recipients have been mostly due to major rearrangements in a country's benefit system or due to modifications in the already existing ITBs.

For example in Estonia a new income-tested family benefit was introduced in 2013, which more than trebled the share of people in households receiving ITBs (from 2 to 7 per cent). Without including this benefit the prevalence of ITBs does not change and is also unaffected by the increase in employment simulated for this country. But including the benefit shows not only how it affects more people but also how that effect reduces (to 6 per cent) when labour market improvements are factored in.

In Poland the changes in ITBs between 2009 and 2014 were minor: child birth allowance became means-tested in 2013 and a special nursing allowance, a benefit addressed to persons taking care of their dependant relatives, was introduced in 2013. These developments translated into an estimated increase in the number of ITB recipients of one percentage point of the population.

In Cyprus means-testing the child benefit and introducing a new ITB for lone parents in 2012 increases the prevalence of ITB receipt from 42 to 56 per cent (58 per cent when increases in unemployment are also taken into account).

In Greece a one-off, lump-sum ITB was paid out in 2014 to individuals on low incomes (the so called *"social dividend"*), the universal benefit for large families became means-tested in 2013 and a new means-tested child benefit was introduced in the same year. These policy changes made a substantial difference to the prevalence of ITBs; the increase in receipt was estimated to be as much as 30 percentage points. On the other hand, our estimates suggest that the income-tested benefits that were in place in 2009 were clearly not suitable for coping with the massive increase in unemployment, as accounting for it makes almost no difference to ITB receipt (it moves from 28 to 29 per cent of the population). The responsiveness of the 2014 policies to the deteriorating labour market conditions seems to have slightly improved, as an additional 4 per cent of the population is in households eligible to receive ITBs when the staggering 17 percentage point increase in unemployment is taken into account.

In the other countries benefits may have been adjusted and reformed and in the case of two of the growth countries this has a large effect. In Lithuania the prevalence of ITB receipt falls from 47 to 20 per cent due to changes in eligibility conditions for child benefit and in the implicit equivalence scale

in social assistance. In Romania it falls from 60 to 49 per cent due to changes in income thresholds in ITBs for families with children and changes in the heating benefit. In both cases increasing employment rates further reduce the ITB prevalence by 1 percentage point.

In the economically declining countries (Group B) the cases of Portugal and Spain stand out. In Portugal stricter means-testing in child benefit and change in the implicit equivalence scale of the social insertion benefit result in a reduction in prevalence from 57 to 40 per cent of the population. The prevalence of ITBs is estimated to rise by 3 percentage points in response to the declining labour market conditions. In the case of Spain, we estimate no effect due to policy reforms (note that the means-tested social assistance and housing benefits are not simulated in EUROMOD), but the large increase in unemployment leads to a relatively large (6 percentage point) increase in the proportion of the population in households receiving ITBs, signalling that the -simulated- unemployment assistance benefit has been receptive to the adverse changes in the Spanish labour market.

Table 4. Percentage of population in households receiving ITBs

Country	BL	CF1	CF2	CF3
A. Growth/recovery				
EE	2	1	7	6
EE_comp	*2*	*1*	*3*	*2*
PL	23	23	24	24
PL_comp	*23*	*23*	*21*	*21*
LT	47	47	20	19
LV	7	6	6	5
SK	16	18	15	17
DE	21	20	19	18
RO	60	60	49	48
B. Decline				
IT	41	41	42	41
ES	33	39	33	39
PT	57	61	40	43
CY	42	45	56	58
CY_comp	*42*	*45*	*42*	*45*
EL	34	34	64	68
EL_comp	28	29	31	34
C. Stability				
AT	28	28	28	28
FR	53	53	53	53
FI	51	51	51	51

Notes: 1. BL: policies as in 2009, market incomes as in 2009, labour market conditions as in 2009;
CF1: policies as in 2009, market incomes as in 2009, labour market conditions as in 2013/14;
CF2: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.
2. LT, ES, PT, CY, FR, FI (in blue) – up to 2013; all other countries (in black) – up to 2014.
3. Recipients are all members of households receiving any ITB.

Source: EUROMOD Version G2.34.

1.2 Coverage and importance of income-tested benefits by income relative to the median and for those at risk-of-poverty

We now turn to an examination of the coverage and relative weight of ITBs at different points in the income distribution. We focus on those in the bottom half of the distribution and in particular on the population at-risk-of-poverty. Figure 1 shows the relationship between household income and ITB receipt for each of the scenarios examined. Income is shown on the horizontal axis in relation to thresholds defined as percentages of median equivalised household disposable income, ranging from 30% to 100%. Figure 2 depicts the fraction of total resources these benefits provide to households with incomes falling below these thresholds. In this figure the vertical axis shows the value of ITBs as a percentage of total gross household income for the respective group as a whole[12]. The standard poverty line, set at 60 per cent of the median, is indicated on the figures, and the fraction of resources and recipients below this threshold are provided in Tables 5 and 6. The 2009 relative poverty thresholds are presented in Appendix 2 (Table A2.6); the figures showing the changes in coverage and importance of ITBs for the subset of ITBs that were applicable both in 2009 and 2013/14 are provided in Appendix 3 (Tables A3.1 – A3.4). The prevalence and relative weight of income-tested benefits throughout the whole income distribution (i.e. by income decile) are also shown in Appendix 3 (Tables A3.5 and A3.6).[13]

Looking first at the coverage rate with respect to the population below the standard poverty line (using 60% of median income as the threshold) it is clear that this varies widely among countries (Table 5): from 13 per cent in Estonia to more than 80 per cent in Romania, France and Finland. In Greece, Latvia, Cyprus and Italy the coverage rate is also relatively low (less than 50 per cent). The changes in ITB receipt during the time period in question reveal some interesting patterns among the three groups of countries. In the growth/recovery Group A, coverage decreases in all countries apart from Estonia. The greatest decrease is estimated for Lithuania, where policy changes result in a drop in the coverage rate of people below the standard poverty line by 14 percentage points. In Estonia, the introduction of a new income-tested family benefit in 2013 increases the coverage rate with respect to the standard poverty line by 27 percentage points. In the economically declining countries of Group B, coverage increases in all of them apart from Italy, where it remains relatively stable. The increase is spectacular in the case of Greece, where policy changes alone result in the coverage rate climbing from 30 to 81 per cent of people below the standard poverty line. In Spain the upward shift in the proportion of poor ITB recipients was estimated to be equal to 9 percentage points. This development is fully attributed to the deteriorating conditions in the Spanish labour market, suggesting that the existing ITBs played a counter-cyclical role during the crisis period. In the stability group C, coverage rates do not change substantially for France and Finland. In Austria, policy changes related to minimum income protection result in a close to 10 per cent increase in coverage.

[12] As in some countries social transfers are taxed, calculating gross ITBs as a share of net incomes would artificially inflate our numerator. Hence, gross household income is used as a denominator instead. The few cases where gross household income is negative are excluded from the analysis.

[13] Over time a considerable amount of re-ranking takes place, as a result of which the composition of income deciles changes. However, we find that not allowing for re-ranking and keeping deciles fixed on the basis of the baseline income distribution (i.e. 2009 equivalised household disposable incomes) reveals very similar patterns.

Table 5. ITB recipients as % of population below the standard poverty line (60% of median)

Country	BL	CF1	CF2	CF3
A. Growth recovery				
EE	13	9	39	32
EE_comp	*13*	*9*	*16*	*13*
PL	58	58	56	57
PL_comp	*58*	*58*	*55*	*56*
LT	63	64	49	49
LV	31	29	28	26
SK	72	74	71	72
DE	68	66	60	58
RO	95	95	94	94
B. Decline				
IT	49	47	49	46
ES	61	71	60	70
PT	66	72	67	71
CY	44	51	46	53
CY_comp	*44*	*51*	*46*	*53*
EL	30	35	81	84
EL_comp	*27*	*33*	*28*	*34*
C. Stability				
AT	59	61	67	69
FR	88	89	89	90
FI	84	83	84	83

Notes: 1. BL: policies as in 2009, market incomes as in 2009, labour market conditions as in 2009;
CF1: policies as in 2009, market incomes as in 2009, labour market conditions as in 2013/14;
CF2: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.
2. LT, ES, PT, CY, FR, FI (in blue) – up to 2013; all other countries (in black) – up to 2014.
3. Recipients are all members of households receiving any ITB.

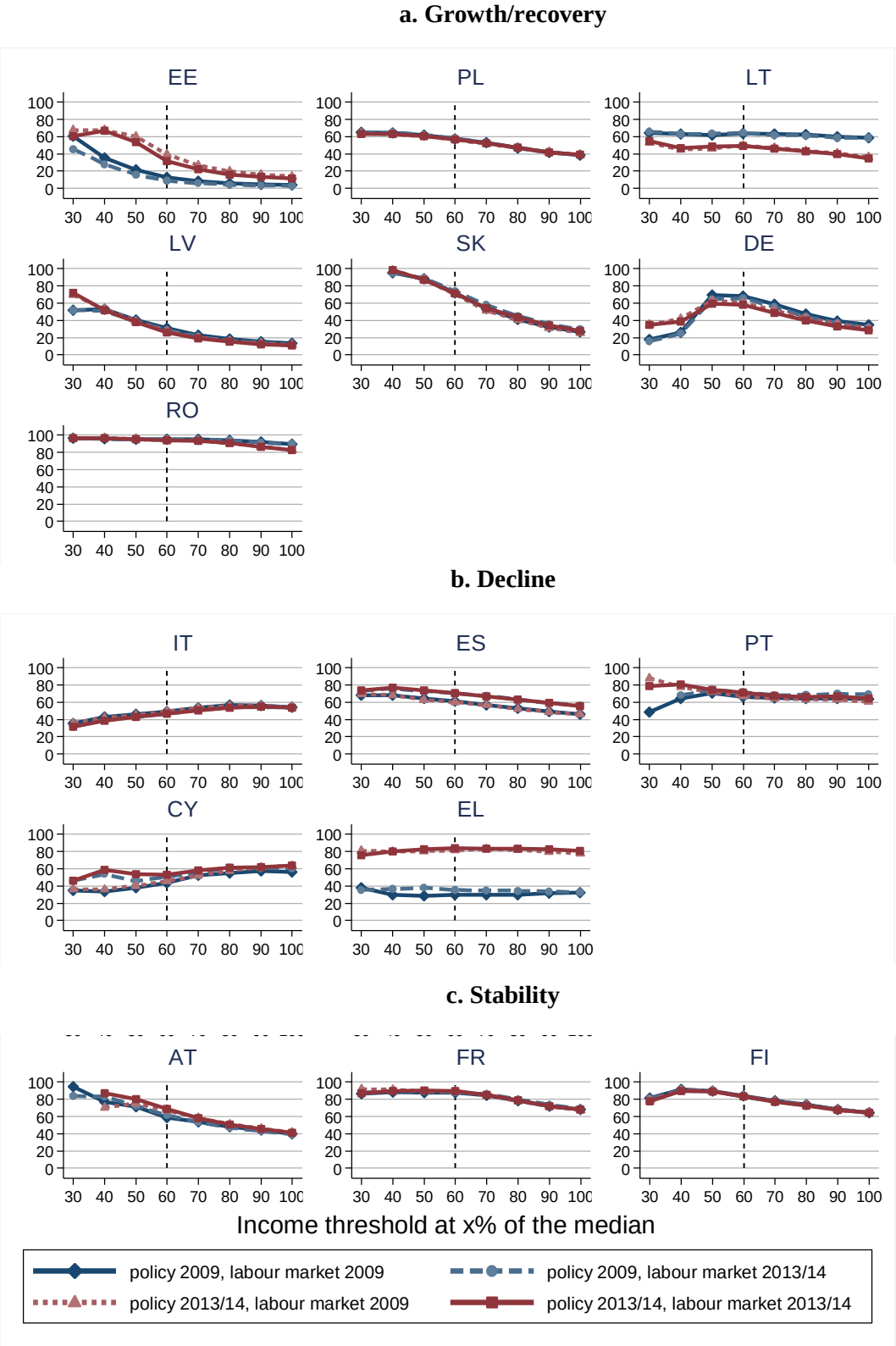
Source: EUROMOD Version G2.34.

Our results for 2009 shown in Figure 1 for income over a range of proportions of the median indicate that in two countries, Romania and France, ITB receipt is very high across all income levels up to the standard poverty threshold and in Romania also up to the median (and Appendix 3 shows how this falls off higher up the income distribution). In contrast, in Estonia, Latvia, Slovakia and Austria ITB receipt falls steeply with increases in income relative to the median, although in the latter two countries recipiency rates start high at the bottom and some receipt is shown in the top half of the distribution (Appendix 3). This pattern is also evident for Poland, Spain, Greece and Lithuania, albeit with a flatter profile below the standard poverty line. In Germany ITB receipt is reverse U-shaped, with the highest participation rates just below the standard poverty line (set at 60% of the median). This suggests that income tests generally aim to ensure a level of income that is close to the poverty line but that there are groups not covered among those with the lowest incomes. The same is evident to some extent in Finland and Portugal in 2009. Receipt of income-tested benefits rises with income in the case of Italy and Cyprus. This pattern is mostly related to the distribution of family allowances in these countries.

Changes between 2009 and 2013/14 are notable in Estonia, Greece, Spain, Cyprus, Lithuania, Portugal, and Romania. In Portugal, where ITB recipients are also located in higher income deciles, the policy changes that took place between 2009 and 2013, and most importantly the stricter means-testing of child benefit in 2011, result in fewer ITB recipients from decile group 5 upwards (Appendix 3). At the same time, receipt rises among those with very low income, mainly due to labour market changes. The fraction of ITB recipients in the three poorest deciles remains one of highest among the 15 EU countries. In Cyprus, policy changes related to the means-testing of child benefit and the introduction a new ITB for lone parents seem to be leaving the poorest 20 per cent of the population relatively unaffected and result in increases in the proportion of ITB recipients from decile group 3 upwards (Appendix 3). The estimated coverage of the poorest income decile somewhat increases but mainly due to adverse changes in their labour market characteristics.

In Lithuania changes in ITB rules result in both a reduction in receipt at all levels of income and a much stronger targeting on lower incomes after the reforms. In 2009, these benefits reached a high proportion of individuals up to decile 7 and declined from decile 8 onwards; in 2013 the decline starts from decile 2 and very few recipients can be found in deciles 5 to 10 (Appendix 3). In Greece, the 2009 picture of ITB receipt being spread evenly all over the income distribution changes markedly in 2014, with the provision of the social dividend and the introduction of the new means-tested benefit for families with children; rates of recipients across the bottom half of the distribution double, the fraction of ITB recipients in the three poorest deciles goes up to more than 80 per cent and decreases as we move higher up the income distribution. In Romania, where ITB receipt in 2009 started to decline only after the sixth income decile group, changes in the income-tested family and heating benefits result in fewer recipients in the middle and higher part of the income distribution (decile groups 4-8) but with little impact on the very high receipt below the standard poverty line. In Estonia, the introduction of a new income-tested family benefit in 2013 is estimated to increase the coverage rate for those on the lowest incomes. The increase in ITB receipt shown for Spain for all incomes below the median is entirely attributable to changes in the Spanish labour market.

Figure 1. ITB recipients as % of the population with household income below percentages of the median



Notes: 1. If the sample contains less than 50 observations the estimates are not shown.
2. Blue solid line: BL; Blue dotted line: CF1; Red dotted line: CF2; Red solid line: CF3.
3. LT, ES, PT, CY, FR, FI – up to 2013; all other countries – up to 2014.

Source: EUROMOD Version G2.34.

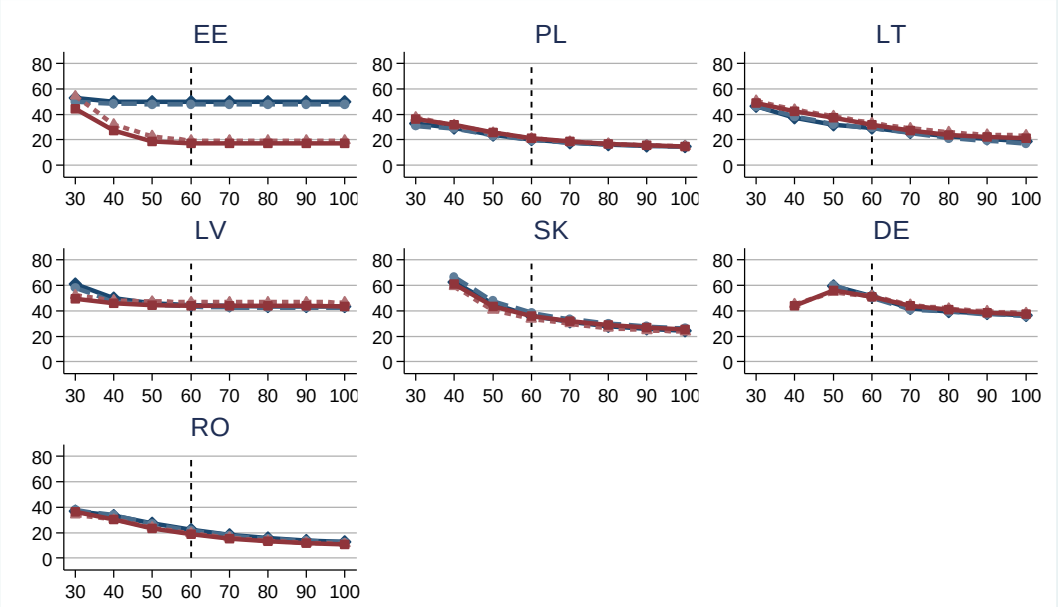
Moving to Figure 2 and Table 6 which indicate the salience of ITBs for the household income of recipients, our results suggest that ITBs make up a small share of poor households' gross income in countries belonging to Group B. In 2009 they provided 10 per cent of resources for households that were below the standard poverty line in Cyprus, 16 per cent in Greece, 22 per cent in Italy and close to 30 per cent in Spain and Portugal. ITBs also make up a relatively small share of poor households' overall resources in Poland (20 per cent), Romania (22 per cent), Lithuania (29 per cent) and Austria (30 per cent). At the other extreme, ITBs provided 52 per cent of resources for households that were below the standard poverty line in Germany and 50 per cent for the -very few- recipient households in Estonia. Not surprisingly the lower the household income, the more important is the share of ITBs. In Slovakia and France ITBs represent a much more notable share of resources for households located close to the extreme poverty line, set at 40 per cent of the median, compared to those located close to the standard one: their relative weight is estimated to be more than 20 percentage points higher, close to 60 per cent of total gross income.

A large increase in the fraction of resources from ITBs for households with incomes below the standard poverty line is estimated in Spain, Cyprus, Greece and Portugal during the crisis period (the share of ITBs goes up by 16, 16, 11 and 8 percentage points respectively). In Cyprus the change is even larger for poorer households with incomes close to the extreme poverty line, whereas in the other three countries the increase proportionally affects households with disposable incomes ranging from 30% to 100% of the median. In all four countries the change is primarily attributed to the adverse developments in the labour market conditions rather than to changes in the level of benefits. The country where the estimated share of resources from ITBs for poor households has fallen the most during this period is Estonia (by 30 percentage points). This was due to the introduction of the new family benefit which increased the ITB coverage but was also much less generous compared to the existing subsistence benefit scheme.

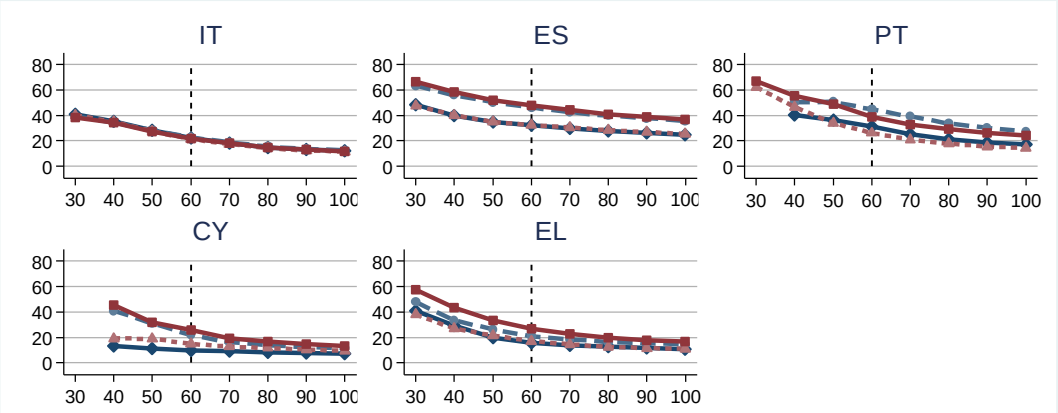
Overall, ITBs play a very minor role from decile 3 upwards in the vast majority of countries studied both in the pre- and the post-crisis period (see Appendix 3). In Spain, where the share of ITB recipients decreases gradually as we move higher up in the distribution, the fraction of household gross income coming from ITBs remains relatively high up to the fourth income decile and becomes even more significant when the labour market developments between 2009 and 2013 are taken into account. The only other country where the ITBs' weight is relatively high (i.e. close to 20 per cent) also in the middle of the income distribution is Germany (in all four scenarios). Finally, in Portugal, the rise in unemployment by 7 percentage points lead to an increase in the fraction of household gross income coming from ITBs (mostly in the form of unemployment assistance benefits) for deciles 1 to 6.

Figure 2. ITB as fraction of household gross income (<u>among ITB recipients</u>) for people with household income below percentages of the median

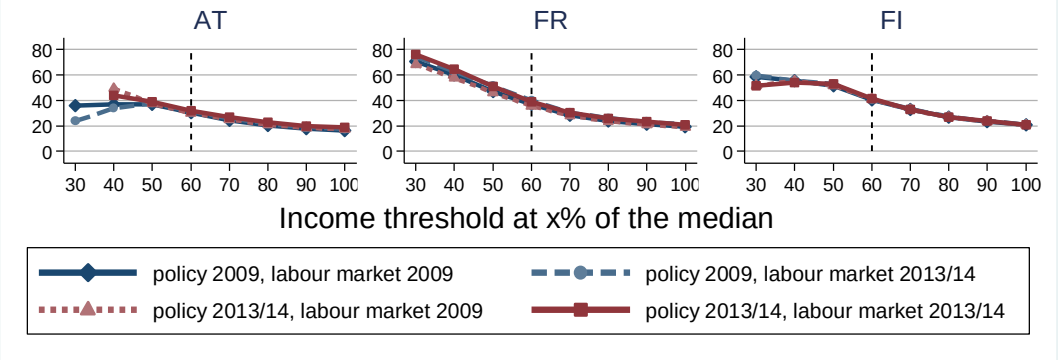
a. Growth/recovery



b. Decline



c. Stability



Notes: 1. If the sample contains less than 50 observations the estimates are not shown.
2. Blue solid line: BL; Blue dotted line: CF1; Red dotted line: CF2; Red solid line: CF3.
3. LT, ES, PT, CY, FR, FI – up to 2013; all other countries – up to 2014.

Source: EUROMOD Version G2.34.

Table 6. ITB as fraction of household gross income (among ITB recipients) below the standard poverty line (60% of median)

Country	BL	CF1	CF2	CF3
A. Growth recovery				
EE	50	48	19	17
EE_comp	*50*	*48*	*42*	*37*
PL	20	20	21	21
PL_comp	*20*	*20*	*21*	*21*
LT	29	29	33	32
LV	44	43	47	44
SK	36	38	34	36
DE	52	50	52	51
RO	22	22	19	19
B. Decline				
IT	22	23	21	22
ES	32	46	32	48
PT	31	45	26	39
CY	10	22	15	26
CY_comp	*10*	*22*	*8*	*19*
EL	16	21	17	27
EL_comp	*16*	*21*	*12*	*17*
C. Stability				
AT	30	31	30	32
FR	37	40	36	39
FI	41	41	41	41

Notes: 1. BL: policies as in 2009, market incomes as in 2009, labour market conditions as in 2009;
CF1: policies as in 2009, market incomes as in 2009, labour market conditions as in 2013/14;
CF2: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.
2. LT, ES, PT, CY, FR, FI (in blue) – up to 2013; all other countries (in black) – up to 2014.
3. Recipients are all members of households receiving any ITB.

Source: EUROMOD Version G2.34.

Conclusions

Income-tested benefits play an increasingly important role in the policy agenda of many EU countries. These benefits become wider in scope and serve not only to target the poor but also to exclude, or reduce the advantage for the rich. Recent research has focused on the coverage and adequacy of the part of these benefits that make up the minimum income package (Figari et al., 2013). However, little is known about the performance of ITBs as a whole and the ways it has been affected by the recent economic crisis.

The aim of this paper has been to compare the effectiveness of all income-tested benefits targeted to the working-age population in 2009 with that in 2014 (or 2013) for fifteen EU countries experiencing differing economic conditions over the period in question. The selected countries are Germany, Estonia, France, Greece, Spain, Italy, Cyprus, Latvia, Lithuania, Austria, Poland, Portugal, Romania, Slovakia and Finland. The benefits' effectiveness was considered (i) in terms of coverage of people by income group, defined in relation to proportions of income at the median (and also, in Appendix 3, in terms of equal-sized decile groups); and for recipients, (ii) in relation to the fraction of households' gross income that these benefits comprise.

Combining microsimulation techniques with the "nowcasting" methodology developed in Rastrigina et al. (2015) we were able to disentangle the part of changes that was due to reforms to policies from the part due to developments in the labour market of each of the countries in question. The underlying micro-data for all countries were drawn from EU-SILC 2010. The EU-wide tax-benefit microsimulation model EUROMOD was used to simulate entitlements to benefits and classify them by whether they are income-tested or not.

The most important findings of this research can be summarised as follows. The estimated share of ITB expenditure in all (non-pension related) benefit expenditure varies widely across the 15 EU Member States: from 3 and 8 per cent in Estonia and Latvia to 46 and 50 per cent in Finland and Portugal. The percentage of the population living in households that are in receipt of some ITB also shows great variability across countries. In 2009 the lowest shares are again found in Estonia and Latvia and the highest in Romania, Portugal, France and Finland. In the latter set of countries more than 50 per cent of the population lives in households receiving ITBs. Considering the coverage and relative weight of ITBs for the population at-risk-of-poverty, we estimate that the countries with the smaller coverage rates of people below the standard poverty line (set at 60 per cent of the median) in 2009 are Estonia, Greece, Latvia, Cyprus and Italy. Those with the largest are Romania, France and Finland. The changes in coverage from 2009 to 2013/14 reveal some interesting patterns: coverage rates decreased in all growth/recovery countries apart from Estonia and increased in all economically declining countries apart from Italy. In 2009 ITBs only made up a small share of poor households' gross income in the latter group of countries. The largest increases in this share were estimated for Spain, Cyprus, Greece and Portugal. However, in all these countries this development is primarily related to the decreases in market incomes due to the deteriorating labour market conditions rather than to increases in the level of benefits or other policy reforms aiming at strengthening the (income-tested) social safety net.

Looking at the prevalence of ITBs throughout the income distribution, our estimates suggest that in Estonia, Latvia and Slovakia recipients are mostly located in the two poorest deciles. The package of ITB benefits in these countries is quite narrow, focusing primarily on minimum income support. In most of the other EU countries examined the share of ITB recipients decreases in a more gradual way

as we move up to higher income deciles. In terms of resources, these benefits seem to be playing a very minor role from decile group 3 upwards. The only countries where the ITBs' weight remains relatively high also in the middle of the income distribution are Germany, Spain and Portugal (in the latter only in 2013 and in Spain and Portugal solely due to decreases in the share of market income as a result of the rising unemployment). It is in these countries that an approach corresponding to progressive universalism seems to be most in evidence, among those considered.

The country where policy changes made the most substantial positive difference to the prevalence of ITBs has been Greece; the increase in receipt was estimated to be as large as 30 percentage points. However, the number of beneficiaries is expected to decrease again in 2015, as the policy that was primarily responsible for this development was a one-off benefit, only paid out in 2014. Other countries where policy changes increased ITB coverage included Estonia (where the average size of ITB payment declined when a new income tested family benefit was introduced) and Cyprus (where the changes extended coverage mostly at the top). In contrast, the country where policy changes have resulted in the biggest decrease in the prevalence of ITBs has been Lithuania, followed by Portugal and Romania.

Examining the role of ITBs as automatic stabilizers in the group of countries in economic decline, our results suggest that the unemployment assistance benefit that was in place in 2009 in Greece was far from responsive to the adverse changes that took place in the Greek labour market. On the contrary, the Spanish unemployment assistance benefits seem to have played an important counter-cyclical role during this period. This has also been the case for the Portuguese ITBs, albeit to a lesser extent. On the other hand, the role of ITBs does not seem to have diminished substantially in any of the growth countries (except due to policy changes), although small effects are shown for Estonia, Latvia and Germany.

Our analysis has shown that patterns of change in coverage and shares of ITBs are not necessarily the same within the three economically-defined groups of countries. One exception is that we observe an automatic stablising role for ITBs in all the declining countries except Italy and, to a small extent, a reduction in the automatic stabilising effect of ITBs in some of the growth countries. Approaches to reforms in ITBs have also varied as much within economic groupings of countries as between them. We have shown examples of policy changes increasing coverage in both declining and growing countries (e.g. Cyprus and Greece on the one hand and Estonia on the other) and also the reverse (Portugal on the one hand and Romania and Lithuania on the other). At the same time, despite the important economic changes that took place during the period from 2009 to 2013/14, in most of the countries considered the structure and overall significance of ITBs did not change considerably.

There are several reasons why our results need to be interpreted with caution. First, income-tested benefits in kind, which may play a complementary role to income-tested cash benefits, are not considered in this study. Secondly, even though a microsimulation approach allows us to simulate the tax-benefit system of countries with a high degree of accuracy, certain aspects of the systems may still be simplified or not simulated at all. The latter has been the case for the income-tested social assistance benefits in Spain and Italy. Thirdly, accounting for benefit non take-up is limited to some of the benefits considered here, namely to those where there is reliable information that non take-up is a significant problem. Clearly, a more comprehensive and uniform treatment of this issue would enhance the comparability and credibility of our estimates but, by its nature, would be challenging.

Fourthly, in all scenarios, the underlying population characteristics remain unchanged, i.e. as depicted in EU-SILC 2010 (except for labour market status). Hence, the comparisons between scenarios are

aimed at capturing the -combined or isolated- effects of changes in policies, market incomes and labour market conditions on ITB receipt. Other changes in the period 2009-2013/14 such as changes in household composition may mitigate or exacerbate the changing role of ITBs, as captured in our analysis. This means that our representation of the situation in 2013/14, and of the changed situation over the period is partial but has the advantage of highlighting some features of the interaction between labour market characteristics and policies that a comparison of two datasets from the two points in time could not capture.

Keeping these caveats in mind, this research offers a new look at the effectiveness of income-tested benefits (considered as a whole) in good times and bad. Given the tight fiscal constraints that are not likely to become much laxer in the foreseeable future, decisions related to social spending are bound to remain a compromise between the strict targeting of people at the bottom of the income distribution and the avoidance of work disincentives, poverty traps and non-take-up. Reaching this compromise in an optimal way requires a sound understanding of each country's ITB system and its ability to cope with major macroeconomic changes, such as those that this analysis set out to explore.

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Appendices

Appendix 1: Description of income-tested benefits (ITB) in 2009 and2013/14

Table A1.1 Germany

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2014
Unemployment benefits II and social benefits	bunnc_s	Provided to people who are not employed and not in receipt of contributory unemployment benefits. Social benefits intend to cover people who live together with unemployment benefit II recipients but who are themselves not eligible to them.	fully simulated	no	allowance for school material introduced in 2011
General social assistance	bsa00_s	Provided to individuals who are not able to work at least 3 hours per day and are not covered by any other social assistance schemes.	fully simulated	no	no
Social assistance for old age and for reduced work ability	bsaoa_s	Provided to people aged 65+ and people who are not eligible to unemployment benefits II because they are unable to work at least three hours a day.	fully simulated	no	no
Additional child benefits	bchot_s	Provided to households with children aged less than 25, who are in receipt of child benefits.	fully simulated	no	no
Education benefits	bed_s	Benefits for students entering higher education.	simulated[1]	no	no
Housing benefits	bho_s	Benefit that covers part of low-income households' rent.	fully simulated	no	heating costs not covered since 2011
Advances on alimony payments	bsaam	Provided to children below 12 who live in single-parent households if the other parent does not provide any alimonies or the amount provided is below the minimum.	not simulated	-	-
Benefits from non-profitable charity organizations	bsapu	Various benefits provided to disadvantaged groups of the population.	not simulated	-	-

Notes: 1. No data on parents' income for students living alone.

Table A1.1 Germany (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Unemployment benefits II and social benefits	37,572	11,628	3,231	33,141	9,680	3,424
General social assistance	1,170	232	5,035	1,142	217	5,254
Social assistance for old age and for reduced work ability	7,354	1,893	3,886	8,028	1,914	4,195
Additional child benefits	514	702	731	408	588	694
Education benefits	3,525	2,571	1,371	2,616	2,036	1,285
Housing benefits	1,621	1,971	822	882	1,016	868
Advances on alimony payments	205	92	2,236	223	92	2,424
Benefits from non-profitable charity organizations	1,421	576	2,469	1,540	576	2,676

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.2 Estonia

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2014
Subsistence benefit	bsa00_s	Social assistance benefit that guarantees a minimum income to all residents after paying for minimum housing costs.	fully simulated	very small amounts are assumed not to be claimed	no
Family benefit	bsach_s	Benefit paid to households with children whose average income in the previous three months is below a certain threshold.	fully simulated	no	introduced in 2013, provided to subsistence benefit recipients in 2014

Table A1.2 Estonia (cont'd)

	2009 (BL)			2014 (CF3)		
Name	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Subsistence benefit	14	26	550	18	30	595
Family benefit	-	-	-	3	64	47

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Table A1.3 Greece

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2014
Child benefit	bch_s	Paid to families with one or more dependent children.	fully simulated	no	introduced in 2013 (no changes since)
Income support to families with children in compulsory education	bched_s	Paid to families with children aged 6 to 16 that are in compulsory education.	fully simulated	no	no
Large family benefit	bfalg_s	Paid to families and lone parents with three or more children.	fully simulated	no	became means-tested in 2013
Pensioners' social solidarity benefit	boact_s	Supplement to low pensions, restricted to those receiving a contributory social insurance pension.	fully simulated	no	expanded (restricted) eligibility conditions in 2011 (2014)
Unemployment assistance for older workers	bunnc_s	Paid to unemployed for more than 12 months not in receipt of the unemployment insurance benefit.	fully simulated	restricted receipt on the basis of the actual number of recipients[1]	expanded age criterion in 2014
Lump sum benefit to civil servants	bcsxp_s	Paid to civil servants, both active and retired.	fully simulated	no	only provided in 2009
Social dividend	bsamttm_s	One-off benefit paid to households on low incomes.	fully simulated	restricted receipt on the basis of the amount that was available for spending[1]	only provided in 2014
Housing benefit	bho	Rent subsidy	not simulated	-	only provided in 2009 and 2011
Minor social assistance benefits	bsaot	Minor benefits provided to disadvantaged groups of the population.	not simulated	-	-

Notes: Random selection of recipients.

Table A1.3 Greece (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Child benefit	-	-	-	634	4,264	149
Income support to families with children in compulsory education	12	114	108	25	221	111
Large family benefit	-	-	-	79	262	303
Pensioners' social solidarity benefit	883	611	1,445	1,225	961	1,275
Unemployment assistance for older workers	2	1	1,260	255	283	903
Lump sum benefit to civil servants	103	738	139	-	-	-
Social dividend	-	-	-	638	2,313	276
Housing benefit	115	166	698	13	28	483
Minor social assistance benefits	404	2,589	156	404	2,589	156

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.4 Spain

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2013
Child benefit	bch00_s	Paid to families with one or more dependent children.	fully simulated	no	no
National child benefit for birth or adoption	bchbamtna_s	Lump-sum payment at birth or adoption of a child	fully simulated	no	no
Regional child benefit	bchmtrg_s	Paid to families with one or more dependent children at a regional level.	fully simulated	no	Extremadura: became means-tested in 2010; Cantabria: abolished in 2013
Regional child benefit for birth/adoption	bchbamtrg_s	Lump-sum payment at birth or adoption provided at a regional level.	fully simulated	no	Andalucía: reformed in 2013; Castilla y León: became a tax credit in 2011
Regional large family benefit	bchlgmtrg_s	Regional benefits provided to families with three or more dependent children	fully simulated	no	no
Unemployment assistance & temporary unemployment protection program	bunnc_s	Benefit available to employees whose unemployment insurance has expired	part-simulated[1]	no	no
Contributory widow pension complement	psuwdcm_s	Paid to all contributory widow pension recipients with widow pensions below the official minimum amount	part-simulated[1]	no	no
Social assistance benefits	bsa_s	Various social assistance benefits / minimum income guaranteed schemes provided at a regional level	not simulated	-	-
Education allowance	bed	Benefits provided to students that comply with the requisites of income and academic performances	not simulated	-	-
Housing benefit	bho	Housing allowances provided at a regional level	not simulated	-	-
Other child benefits	bchot	Various other child benefits	not simulated	-	-
Other unemployment benefits	bunot	Various other unemployment benefits	not simulated	-	-

Notes: 1. Eligibility taken from the data.

Table A1.4 Spain (cont'd)

Name	2009 (BL)			2013 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Child benefit	611	4,763	128	585	5,096	115
National child benefit for birth or adoption	24	138	176	23	130	179
Regional child benefit	46	259	179	29	246	119
Regional child benefit for birth/adoption	32	129	248	37	147	251
Regional large family benefit	2	25	74	0	0	0
Unemployment assistance & temporary unemployment protection program	2,642	2,292	1,153	10,117	6,397	1,582
Contributory widow pension complement	1,037	906	1,144	1,299	912	1,425
Social assistance benefits	2,009	1,508	1,332	2,192	1,508	1,453
Education allowance	552	768	719	602	768	784
Housing benefit	1,046	2,714	386	1,142	2,714	421
Other child benefits	1,115	1,896	588	1,153	1,896	608
Other unemployment benefits	429	317	1,353	433	317	1,365

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.5 France

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2013
Benefit for young children	bchyc_s	Benefit received by households with children under 3 (born after 2004)	fully simulated	no	no
Benefit for widows/ers	bsuwd_s	Provided to widows/ers not remarried aged under 55 for 2 years.	part-simulated[1]	no	no
Unemployment assistance benefit	bunmt_s	Provided to people who have exhausted their rights to unemployment insurance.	fully simulated	no	no
Benefit for large families	bchlg_s	Provided to families with at least 3 children all aged 3 years or more.	fully simulated	no	no
Educational grant	bched_s	Provided to families with at least one child aged 6 to 18 who is at school.	fully simulated	no	households who slightly exceed the income threshold are still eligible for a residual benefit amount (since 2012)
Means tested birth grant	bchba_s	Lump-sum payment at birth or adoption of a child aged below 20.	simulated[2]	no	no
Disability benefit	bdi_s	Provided to individuals with a permanent disability of at least 80% or a disability of 50%-80% and unemployable.	fully simulated	no	no
Guaranteed minimum income	bsa00_s	Provided to households with incomes lower than a specified amount.	fully simulated	30% (60%) take-up for families with (no) work income[3]	no
Housing allowance	bhotn_s	Provided to tenants, people living in subsidised housing and first-time house buyers.	simulated[4]	no	no
Special education allowance	bchot	Provided to families with disabled children attending special schools.	not simulated	-	-
Other social assistance benefits	bsaot	Other social assistance benefits	not simulated	-	-
Other housing benefits	bhoot	Other housing benefits	not simulated	-	-
Scholarships	bed	Educational allowances	not simulated	-	-

Notes: 1. Eligibility taken from the data.
2. Only the benefit for childbirth is simulated.
3. Random selection of recipients.
4. Only the benefit for tenants is simulated.

Table A1.5 France (cont'd)

Name	2009 (BL)			2013 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Benefit for young children	3,950	7,139	553	4,043	7,090	570
Benefit for widows/ers	221	85	2,587	221	85	2,587
Unemployment assistance benefit	1,853	1,547	1,198	3,182	2,555	1,245
Benefit for large families	1,023	2,719	376	1,058	2,708	391
Educational grant	1,214	9,726	125	1,530	9,751	157
Means tested birth grant	571	2,486	230	581	2,454	237
Disability benefit	1,564	306	5,111	1,682	297	5,656
Guaranteed minimum income	3,028	849	3,565	3,589	916	3,920
Housing allowance	4,284	3,495	1,226	4,692	3,715	1,263
Special education allowance	10,245	10,054	1,019	10,348	9,500	1,089
Other social assistance benefits	8,455	18,821	449	8,728	18,821	464
Other housing benefits	2,856	1,543	1,851	3,035	1,543	1,967
Scholarships	1,485	3,417	435	1,554	3,417	455

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Table A1.6 Italy

Name	EUROMOD Name	Description	Treatment in EUROMOD	Take-up corrections	Major simulated changes from 2009 to 2014
Family Allowance for 1 parent and children	bfalp_s	Benefit provided to families with one parent and at least one child aged less than 18.	fully simulated	no	no
Family Allowance for couple and 0 child	bfacpxc_s	Benefit provided to couples with no children.	fully simulated	no	no
Family Allowance for 2 parents and children	bfacpwc_s	Benefit provided to families with two parents and at least one child aged less than 18.	fully simulated	no	no
Social pension and social allowance to individuals older than 65	poamt_s	Social assistance benefit provided to individuals aged at least 65.	fully simulated	no	no
Child benefit	bchot	Family allowance for families with at least three children (paid off by municipalities)	not simulated	-	-
Social assistance	bsa	Minimum insertion income (paid off by some municipalities)	not simulated	-	-
Scholarships and grants	bed	Scholarships and grants	not simulated	-	-
Housing benefits	bho	Rent - related benefits and mortgage benefits	not simulated	-	-

Table A1.6 Italy (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Family Allowance for 1 parent and children	1,328	2,726	487	1,298	2,690	482
Family Allowance for couple and 0 child	893	6,653	134	866	6,570	132
Family Allowance for 2 parents and children	4,287	13,552	316	4,310	13,432	321
Social pension and social allowance to individuals older than 65	3,700	2,087	1,773	4,069	2,099	1,938
Child benefit	316	594	531	348	594	587
Social assistance	1,598	572	2,794	917	572	1,604
Scholarships and grants	1,010	843	1,198	1,115	843	1,323
Housing benefits	591	1,535	385	653	1,535	425

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.7 Cyprus

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2013
Public assistance benefit	bsa_s	Non-contributory benefit designed to compensate unemployed / economically inactive persons with income falling below a certain threshold.	simulated[1]	no	no
Child benefit: basic amount	bch00_s	Non-contributory benefit provided to families with dependent children.	fully simulated	no	became means-tested in 2012; definition of dependent child changed in 2012.
Child benefit: supplementary amount	bch01_s	Supplementary benefit provided to families with dependent children.	fully simulated	no	no
Student Grant	bedet_s	Non-contributory benefit provided to families with children in higher education	fully simulated	no	total gross family income taken into account since 2012
Benefit for lone parents	bsalp_s	Non-contributory benefit provided to lone-parent families receiving child benefit	fully simulated	no	introduced in 2012 (no changes since)
Housing benefits	bho	Housing allowances	not simulated	-	-

Notes: 1. Apart from some eligibility conditions. For more detailed information, see the EUROMOD Country Report for Cyprus.

Table A1.7 Cyprus (cont'd)

Name	2009 (BL)			2013 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Public assistance benefit	90	64	1,419	99	50	1,991
Child benefit: basic amount	-	-	-	93	358	260
Child benefit: supplementary amount	14	172	83	16	210	76
Student Grant	80	151	527	66	154	426
Benefit for lone parents	-	-	-	43	37	1,163
Housing benefits	56	23	2,438	61	23	2,648

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.8 Latvia

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2014
Guaranteed minimum income benefit	bsamm_s	Social assistance benefit ensuring that household income does not fall below a certain threshold.	fully simulated	no	changes in definition of dependent children, rules of Riga municipality, eligibility conditions
Housing benefit	bho_s	Social assistance benefit provided to families with low income to support their primary needs for housing.	fully simulated[1]	no	no

Notes: 1. According to the rules applied in Riga.

Table A1.8 Latvia (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Guaranteed minimum income benefit	19	100	194	17	74	228
Housing benefit	26	147	178	24	118	199

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Table A1.9 Lithuania

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2013
Social benefit	bsa00_s	Granted to families/ single persons in case of income maintenance need.	fully simulated[1]	no	change in equivalence scale and eligibility conditions
Child benefit	bch00_s	Cash benefit paid to families raising one or more dependent children.	fully simulated	no	change in eligibility conditions
Housing allowances	bho	Housing allowances	not simulated	-	-
Municipal and NGO support	bsals	Municipal and NGO support	not simulated	-	-

Notes: 1. Limited information on assets.

Table A1.9 Lithuania (cont'd)

	2009 (BL)			2013 (CF3)		
Name	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Social benefit	429	253	1,697	303	201	1,509
Child benefit	480	1,411	340	112	407	276
Housing allowances	65	141	460	93	141	665
Municipal and NGO support	2	10	175	2	10	195

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.10 Austria

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2014
Child care benefit	bcc00_s	Benefit for parents taking care of young children.	fully simulated[1]	no	more alternatives added to the scheme, introduction of supplement in case of multiple birth
Child care benefit supplement/allowance	bcctu_s	Benefit for lone parents or families with low incomes.	fully simulated	no	major reform in 2010[2]
Social assistance Vienna/ Minimum income benefit (since 2011)	bsa_s	Social assistance benefit ensuring that household income does not fall below a certain threshold (includes housing and heat allowances).	fully simulated[3]	no	major reform in 2011 (heat allowance abolished, benefit rates according to household types)
Family bonus Vienna	bfamt_s	Benefit for parents taking care of children aged 1-3.	fully simulated	no	no
Unemployment assistance	bunnc_s	Benefit for unemployed persons who have exhausted entitlement to unemployment benefit.	part-simulated[4]	no	changes in means-testing (2011)
Family supplement	bunmt_s	Benefit paid to unemployment insurance benefit recipients for the maintenance of relatives.	part-simulated[4]	no	no
Educational benefits	bed	Study allowance.	not simulated	-	-
Other unemployment benefits	bunot	Various minor unemployment benefits.	not simulated	-	-
Unemployment benefit for training	buntr	Unemployment benefit for training.	not simulated	-	-
Housing allowance	bho	Benefit for the coverage of housing costs.	not simulated	-	-

Notes: 1. Use of random numbers to replicate the empirical distribution of beneficiaries into different schemes.
2. For more detailed information, see the EUROMOD Country Report for Austria *(https://www.iser.essex.ac.uk/files/euromod/country-reports/Year5/CR_AT_2009_2013_FINAL.pdf).*
3. The rules in Vienna apply for the whole country
4. Eligibility taken from the data.

Table A1.10 Austria (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Child care benefit	937	793	1,182	880	725	1,214
Child care benefit supplement/allowance	82	153	533	14	24	580
Social assistance Vienna/ Minimum income benefit (since 2011)	459	185	2,475	1,099	413	2,662
Family bonus Vienna	13	41	312	22	64	343
Unemployment assistance	624	295	2,113	682	360	1,894
Family supplement	76	752	101	68	665	103
Educational benefits	301	377	798	337	377	895
Other unemployment benefits	122	65	1,881	137	65	2,108
Unemployment benefit for training	156	224	694	170	215	790
Housing allowance	317	443	716	356	443	803

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.11 Poland

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2014
Basic child benefit	bch00_s	Non-contributory benefit granted to families with dependent children.	fully simulated	no	no
Supplement for child birth	bchba_s	Lump sum grant paid upon the birth of a child.	fully simulated	no	no
Supplement for education of disabled child	bchdied_s	Benefit granted to the parent or guardian of a disabled child until the child attains the age of 16 or 24.	fully simulated	no	no
Supplement for starting the school year	bched_s	Supplement payable for each child in primary and secondary education.	fully simulated	no	no
Supplement for lone parent	bchlp00_s	Supplement paid to a lone parent who does not receive any alimony payments.	part-simulated[1]	no	no
Supplement for large families	bchlg_s	Non-contributory benefit granted to families with three or more dependent children.	fully simulated	no	no
Nursing benefit	bcrchdi_s	Benefit paid to families with disabled children whose parents take voluntarily leave to support them.	fully simulated	no	became universal in 2010
Special nursing allowance	bdinc_s	Benefit addressed to persons taking care of their dependant relatives.	fully simulated	no	introduced in 2013 (no changes since)
Permanent social assistance	bsapm_s	Allowance for persons incapable of working due to disability or age, who are not entitled to social insurance invalidity pension.	fully simulated	no	no
Temporary social assistance	bsatm_s	Benefit paid to persons who are experiencing financial problems due to unemployment, chronic illness, disability; or to persons with incomes lower than the social assistance threshold and are ineligible for social protection.	fully simulated	restricted receipt on the basis of the actual number of recipients	no
Child birth allowance	bchbamtna_s	Benefit paid to parents of new-born children.	fully simulated	no	became mean-tested in 2013
Housing benefit	bho_s	Benefit meant to support households with their housing expenditures (i.e. rent and bills).	part-simulated[1]	no	no
Other child benefits	bchot	Supplement for education outside place of living.	not simulated	-	-
Parental leave allowance	bchpl	Supplement due to taking care of a child during child-care leave.	not simulated	-	-
Other social assistance benefits	bsaot	Special social assistance and help from NGSs.	not simulated	-	-

Notes: 1. Eligibility taken from the data.

Table A1.11 Poland (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Basic child benefit	1,688	5,698	296	2,353	4,821	488
Supplement for child birth	124	630	197	104	529	196
Supplement for education of disabled child	117	629	187	105	559	187
Supplement for starting the school year	158	4,331	36	133	3,606	37
Supplement for lone parent	243	261	929	230	245	938
Supplement for large families	389	1,626	239	338	1,382	244
Nursing benefit	258	267	966	-	-	-
Permanent social assistance	644	509	1,267	787	509	1,548
Temporary social assistance	608	806	754	1,157	1,159	998
Housing benefit	567	738	768	533	631	844
Special nursing allowance	-	-	-	145	103	1,409
Child birth allowance	-	-	-	355	1,670	213
Other child benefits	2,308	4,432	521	2,569	4,432	580
Parental leave allowance	366	505	726	408	505	808
Other social assistance benefits	139	838	166	154	838	184

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.12 Portugal

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2013
Unemployment assistance	bunnc_s	Provided either as an initial benefit to persons who cannot claim the main unemployment benefit or as an extension to those who cease to be entitled to it.	part-simulated[1]	no	changes in benefit unit and equivalence scale in 2011
Child benefit	bch_s	Non-contributory benefit granted to families with dependent children.	fully simulated	no	changes in the supplement for children at school, stricter means-testing (2011)
Social insertion income	bsa00_s	Social assistance benefit ensuring that household income does not fall below a certain threshold.	fully simulated	no	change in benefit unit, abolishment of supplement for new-born, 3rd and subsequent child and rent (2011)
Other social assistance benefits	bsaot	Other social assistance benefits	not simulated	-	-
Housing benefit	bho	Housing benefit	not simulated	-	-

Notes: 1. Eligibility taken from the data.

Table A1.12 Portugal (cont'd)

	2009 (BL)			2013 (CF3)		
Name	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Unemployment assistance	368	316	1,164	1,957	1,065	1,837
Child benefit	914	5,260	174	606	3,375	180
Social insertion income	552	569	970	104	196	528
Other social assistance benefits	57	86	665	57	86	665
Housing benefit	161	808	199	161	808	199

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Table A1.13 Romania

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2014
Minimum guaranteed income	bsa_s	Social assistance benefit ensuring that household income does not fall below a certain threshold.	simulated[1]	no	no
Educational allowance	bched_s	Benefit given to families with children below the age of 18 who are attending upper secondary education.	simulated[2]	no	no
Family benefits	bchmt_s	Non-contributory benefit granted to families with dependent children.	simulated[3]	no	changes in the way income thresholds are calculated
Heating benefit	bhoen_s	Benefit given to poor families that cannot afford the expenses of home heating during the cold season.	simulated[3]	no	different rules for calculating compensation for single vs multi- person households (2011)
Other educational allowances	bed	Scholarships and student grants.	not simulated	-	-

Notes: 1. Asset test partially simulated, work test not simulated.
2. Asset test partially simulated, sanctions due to absenteeism not simulated.
3. Asset test partially simulated.

Table A1.13 Romania (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Minimum guaranteed income	1,477	2,771	533	1,108	2,136	519
Educational allowance	349	730	478	249	529	471
Family benefits	1,268	7,695	165	919	4,970	185
Heating benefit	763	10,658	72	561	8,913	63
Other educational allowances	78	177	442	94	177	529

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Table A1.14 Slovakia

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2014
Material needs benefit	bsa00_s	Benefits for families with income below the minimum subsistence level (includes social benefit, activation allowance, health care allowance, housing allowance and protection allowance).	fully simulated	no	allowance for dependent child introduced in 2014, Health-care Allowance abolished in 2014
Means-tested scholarships	bsaot	Means-tested scholarships	not simulated	-	-

Table A1.14 Slovakia (cont'd)

Name	2009 (BL)			2014 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Material needs benefit	364	842	432	439	913	481
Means-tested scholarships	4	63	65	4	63	70

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.

Source: EUROMOD Version G2.34.

Table A1.15 Finland

Name	EUROMOD Name	Description	Treatment in EM	Take-up corrections	Major simulated changes from 2009 to 2013
Study grant	bed00_s	Benefit paid for full-time studies after comprehensive school.	fully simulated	no	no
Labour market subsidy	bunmt_s	Benefit granted to unemployed persons aged 17–64 who are registered as job seekers.	part-simulated[1]	no	spouses' income excluded from means-testing in 2013
Pensioner housing allowance	bhope_s	Paid to pensioners with low incomes depending on their housing costs and family structure.	simulated[2]	no	no
Student housing supplement	bhosd_s	Benefit designed to cover a share of students' housing costs.	simulated[3]	no	no
Child home care allowance	bcc_s	Benefit designed to support the child care of small children at home.	part-simulated[1]	no	no
Local authority income support	bsa00_s	Benefit that ensures the minimum subsistence to all persons and families.	fully simulated	households with self-employed as a head are excluded from receipt	no
Other housing benefits	bhoot	Other housing benefits	not simulated	-	-
General housing allowance	bho00	Benefit meant to decrease the housing costs of low-income households.	not simulated	-	-
Other unemployment benefits	bunot	Other unemployment benefits.	not simulated	-	-
Other education benefits	bedot	Other education benefits.	not simulated	-	-
Other social assistance benefits	bsaot	Other social assistance benefits.	not simulated	-	-

Notes: 1. Eligibility taken from the data.
2. Apart from asset test.
3. Apart from test of parental income.

Table A1.15 Finland (cont'd)

Name	2009 (BL)			2013 (CF3)		
	Expenditure	Recipients	Expenditure per recipient	Expenditure	Recipients	Expenditure per recipient
Study grant	557	620	899	511	550	929
Labour market subsidy	658	346	1,903	973	392	2,485
Pensioner housing allowance	444	334	1,332	511	336	1,522
Student housing supplement	264	180	1,468	247	168	1,472
Child home care allowance	382	480	796	404	480	841
Local authority income support	394	151	2,599	468	151	3,107
Other housing benefits	11	427	26	12	427	29
General housing allowance	439	443	990	479	443	1,082
Other unemployment benefits	1,286	1,187	1,083	1,392	1,177	1,183
Other education benefits	187	576	324	204	576	354
Other social assistance benefits	44	264	165	47	264	177

Notes: Annual expenditure in millions (national currency); recipients in thousands.
Recipients are all members of households receiving the ITB.
Source: EUROMOD Version G2.34.

Appendix 2: Tables A2.1 – A2.6

TABLE A2.1 CHILDREN AS % OF POPULATION BY INCOME DECILE – BASELINE SCENARIO (2009)

Country	1	2	3	4	5	6	7	8	9	10	Total
A. Growth/recovery											
EE	28	19	21	21	23	24	21	25	23	21	23
PL	32	31	27	25	22	23	21	21	20	19	24
LT	27	30	28	26	21	22	24	20	22	20	24
LV	31	29	18	20	18	22	22	21	19	20	22
SK	37	32	26	22	22	22	22	17	15	14	23
DE	15	25	26	23	20	20	15	15	13	10	18
RO	34	28	27	27	26	23	22	18	17	17	24
B. Decline											
IT	33	25	26	24	22	20	19	18	15	13	21
ES	31	27	22	21	21	19	18	17	19	16	21
PT	28	24	24	22	22	21	18	19	20	20	22
CY	17	30	34	36	34	29	22	24	24	20	27
EL	28	23	22	19	20	19	19	25	20	17	21
C. Stability											
AT	24	26	25	22	18	16	16	12	11	13	18
FR	28	29	26	24	24	21	21	19	19	17	23
FI	20	20	21	24	24	23	22	19	17	14	20

Note: Children are defined as individuals below 16 or between 16 and 24 (if receive no income from employment or self-employment) living together with at least one parent.
Source: EUROMOD Version G2.34.

TABLE A2.2 ELDERLY (65+) AS % OF POPULATION BY INCOME DECILE - BASELINE SCENARIO (2009)

Country	1	2	3	4	5	6	7	8	9	10	Total
A. Growth/recovery											
EE	7	35	31	31	19	15	11	8	7	5	17
PL	8	15	17	18	18	16	14	14	10	7	14
LT	4	11	22	26	26	21	18	15	10	6	16
LV	5	14	38	26	27	17	11	10	10	9	17
SK	5	16	22	25	19	19	10	10	5	4	13
DE	23	19	23	24	23	21	18	15	16	18	20
RO	3	22	21	17	19	15	16	15	11	10	15
B. Decline											
IT	6	25	23	25	27	24	20	18	17	19	20
ES	8	17	22	22	18	22	17	14	12	12	16
PT	14	28	29	23	19	13	15	13	11	15	18
CY	40	23	13	7	6	7	9	4	8	10	13
EL	12	24	26	28	26	19	17	12	11	12	19
C. Stability											
AT	17	21	21	16	18	17	16	15	16	15	17
FR	12	16	21	21	17	15	13	15	18	21	17
FI	19	30	30	21	17	15	11	9	8	9	17

Source: EUROMOD Version G2.34.

TABLE A2.3 INDIVIDUALS LIVING IN MULTI-UNIT HOUSEHOLDS AS % OF POPULATION BY INCOME DECILE - BASELINE SCENARIO (2009)

Country	1	2	3	4	5	6	7	8	9	10	Total
A. Growth/recovery											
EE	26	24	25	30	31	38	37	32	29	21	30
PL	44	45	46	49	50	53	52	48	46	34	47
LT	34	30	28	26	37	43	40	41	36	40	36
LV	38	44	37	44	52	54	53	51	54	44	47
SK	36	35	39	42	46	48	54	62	61	61	48
DE	9	13	15	17	24	19	25	24	22	16	18
RO	44	43	46	48	43	53	51	54	62	42	48
B. Decline											
IT	26	27	23	25	29	34	38	39	40	38	32
ES	32	34	41	43	44	45	44	44	38	33	40
PT	32	34	32	39	44	43	49	41	46	36	40
CY	26	26	33	42	41	43	52	42	38	40	38
EL	29	27	32	36	38	45	50	35	41	39	37
C. Stability											
AT	18	22	26	33	36	41	40	48	37	36	34
FR	21	17	20	20	23	24	17	17	19	15	19
FI	10	12	21	18	19	20	17	18	16	13	16

Note: Multi unit households are households that contain more than one nuclear family. A nuclear family is defined as a single person or a couple with dependent children. Dependent children are defined as individuals below 16 or between 16 and 24 (if receive no income from employment or self-employment) living together with at least one parent.

Source: EUROMOD Version G2.34.

TABLE A2.4 UNWEIGHTED NUMBER OF ITB RECIPIENTS

Country	Number of ITB recipients 2009 (BL)	2013/2014 (CF3)
A. Growth/ recovery		
EE	295	993
PL	9,425	9,836
LT	5,237	1,991
LV	1,035	804
SK	2,318	2,560
DE	5,201	4,313
RO	10,617	8,295
B. Decline		
IT	19,635	19,515
ES	13,045	14,562
PT	7,107	5,580
CY	4,808	6,700
EL	6,017	11,923
C. Stability		
AT	3,543	3,623
FR	14,065	14,065
FI	13,116	12,911

Notes: 1. LT, ES, PT, CY, FR, FI (in blue) – ITB as in 2013; all other countries (in black) – ITB as in 2014.
2. BL: policies as in 2009, market incomes as in 2009, labour market status as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.
3. Recipients are all members of households receiving any ITB.

Source: EUROMOD Version G2.34.

TABLE A2.5 EXPENDITURE ON SIMULATED ITB AS A PROPORTION OF ALL ITB, 2009 AND 2013/2014

Country	Simulated ITB (% of all ITB)	
	2009 (BL)	2013/14 (CF3)
A. Growth/recovery		
EE	100	100
PL	63	67
LT	93	81
LV	100	100
SK	99	99
DE	97	96
RO	98	97
B. Decline		
IT	74	78
ES	66	77
PT	91	93
CY	77	84
EL	66	87
C. Stability		
AT	71	73
FR	67	68
FI	58	59

Notes: 1. BL: policies as in 2009, market incomes as in 2009, labour market status as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market status as in 2013/14.
2. LT, ES, PT, CY, FR, FI (in blue) – ITB as in 2013; all other countries (in black) – ITB as in 2014.

Source: EUROMOD Version G2.34.

TABLE A2.6 RELATIVE POVERTY LINES

Country	BL	CF1	CF2	CF3
A. Growth/ recovery				
EE	3,436	3,580	4,177	4,345
PL	11,316	11,316	13,782	13,782
LT	8,292	8,481	8,510	8,734
LV	1,888	1,924	2,127	2,182
SK	3,461	3,425	3,803	3,768
DE	10,940	11,141	12,012	12,278
RO	5,155	5,226	6,210	6,272
B. Decline				
IT	8,789	8,495	9,462	9,122
ES	8,018	7,597	8,130	7,704
PT	5,438	5,156	5,428	5,084
CY	10,217	9,378	10,602	9,859
EL	7,366	6,394	5,759	5,155
C. Stability				
AT	12,331	12,444	13,033	13,051
FR	11,873	11,818	12,499	12,445
FI	12,571	12,554	13,762	13,732

Notes: 1. Poverty lines are set at 60% of median equivalised disposable income, using the OECD modified equivalence scale. All amounts are yearly, in national currencies.
2. LT, ES, PT, CY, FR, FI (in blue) – up to 2013; all other countries (in black) – up to 2014.
4. BL: policies as in 2009, market incomes as in 2009, labour market conditions as in 2009;
CF1: policies as in 2009, market incomes as in 2009, labour market conditions as in 2013/14;
CF2: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2009;
CF3: policies as in 2013/14, market incomes as in 2013/14, labour market conditions as in 2013/14.

Source: EUROMOD Version G2.34.

Appendix 3: Figures A3.1 – A3.6

FIGURE A3.1: ITB RECIPIENTS AS % OF THE POPULATION WITH HOUSEHOLD INCOME BELOW PERCENTAGES OF THE MEDIAN

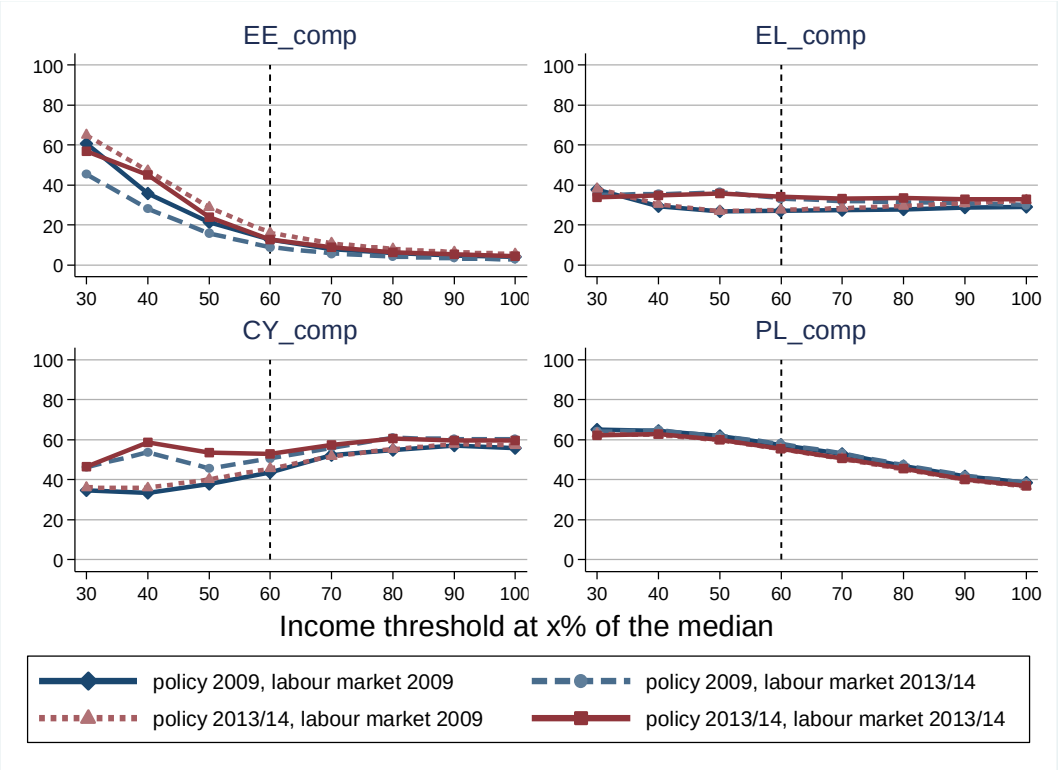


FIGURE A3.2: ITB AS FRACTION OF HOUSEHOLD GROSS INCOME (AMONG ITB RECIPIENTS) FOR PEOPLE WITH HOUSEHOLD INCOME BELOW PERCENTAGES OF THE MEDIAN

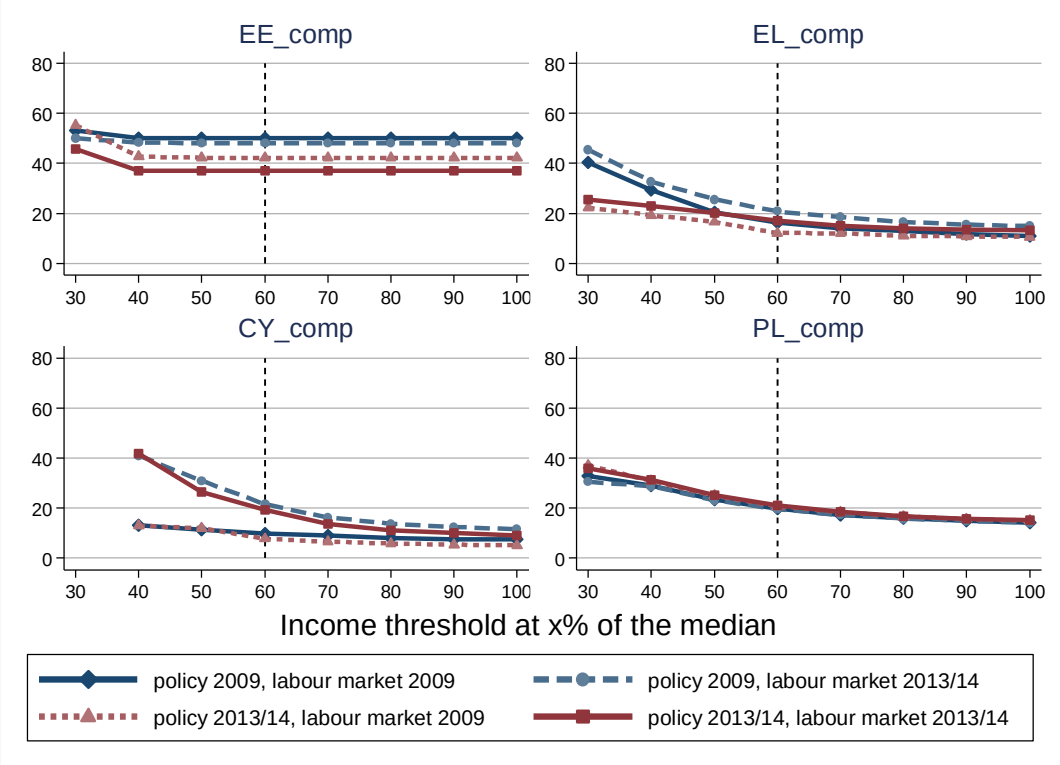


FIGURE A3.3: ITB RECIPIENTS AS % OF THE POPULATION BY DECILE GROUP

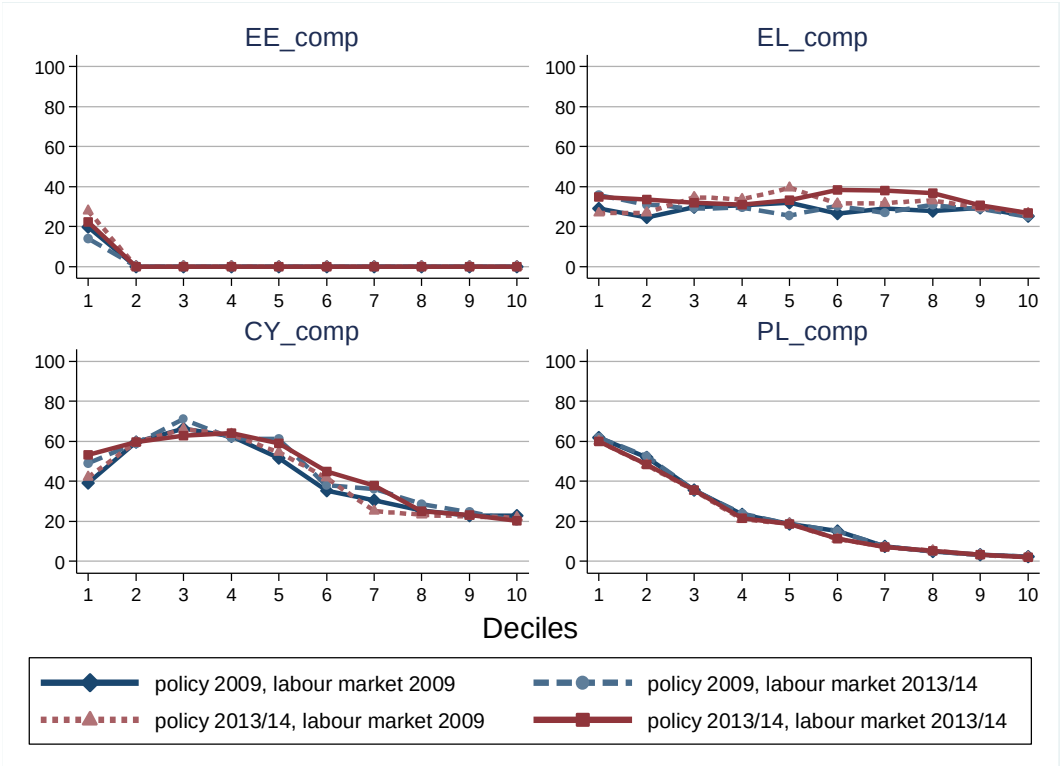
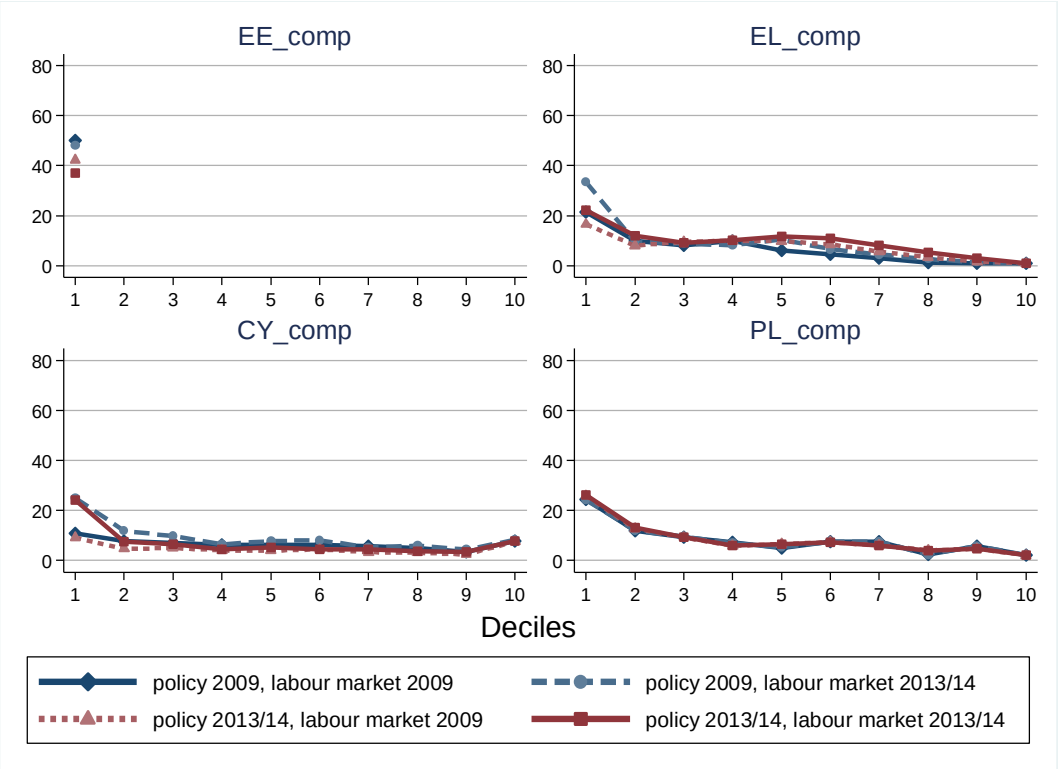


FIGURE A3.4: ITB AS FRACTION OF HOUSEHOLD GROSS INCOME (AMONG ITB RECIPIENTS) BY DECILE GROUP

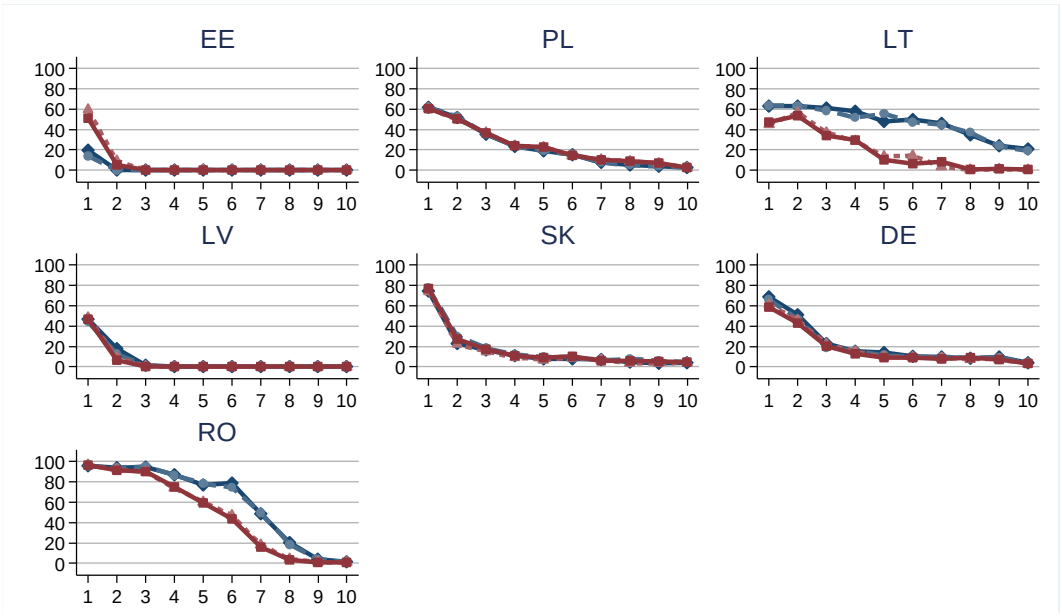


Notes: 1. If the sample contains less than 50 observations the estimates are not shown.
2. Blue solid line: BL; Blue dotted line: CF1; Red dotted line: CF2; Red solid line: CF3.
3. LT, ES, PT, CY, FR, FI – up to 2013; all other countries – up to 2014.

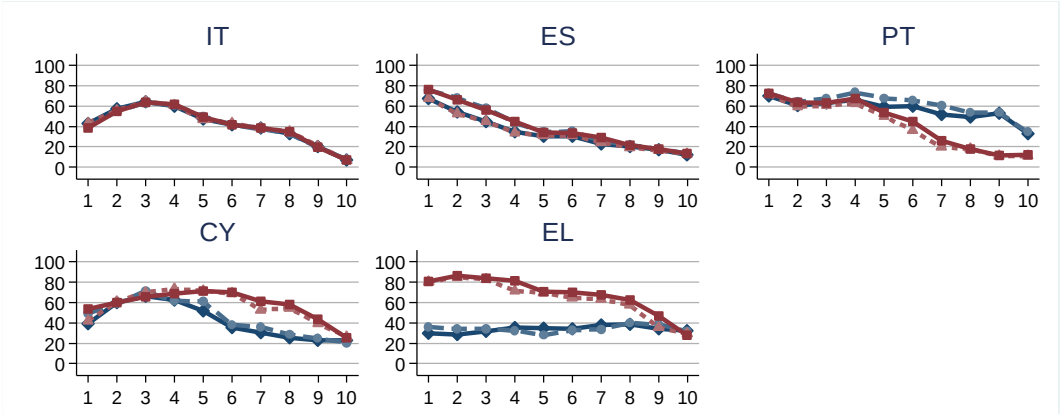
Source: EUROMOD Version G2.34.

FIGURE A3.5 ITB RECIPIENTS AS % OF THE POPULATION BY DECILE GROUP OF HOUSEHOLD DISPOSABLE INCOME

a. Growth/recovery



b. Decline



c. Stability

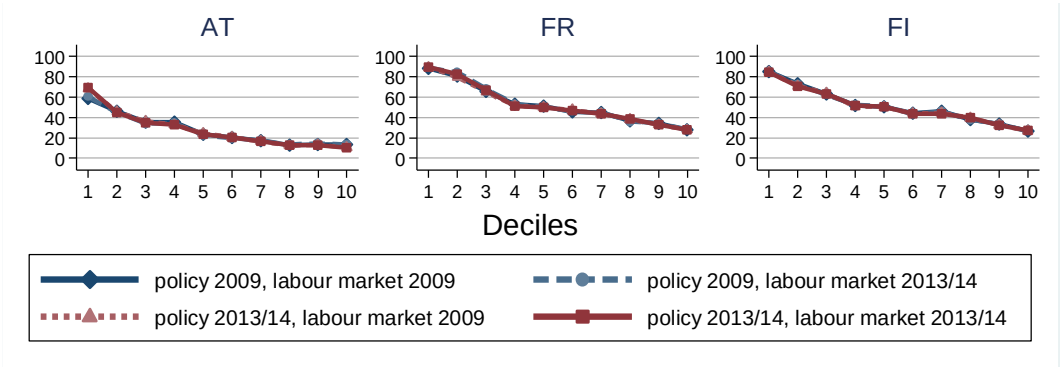
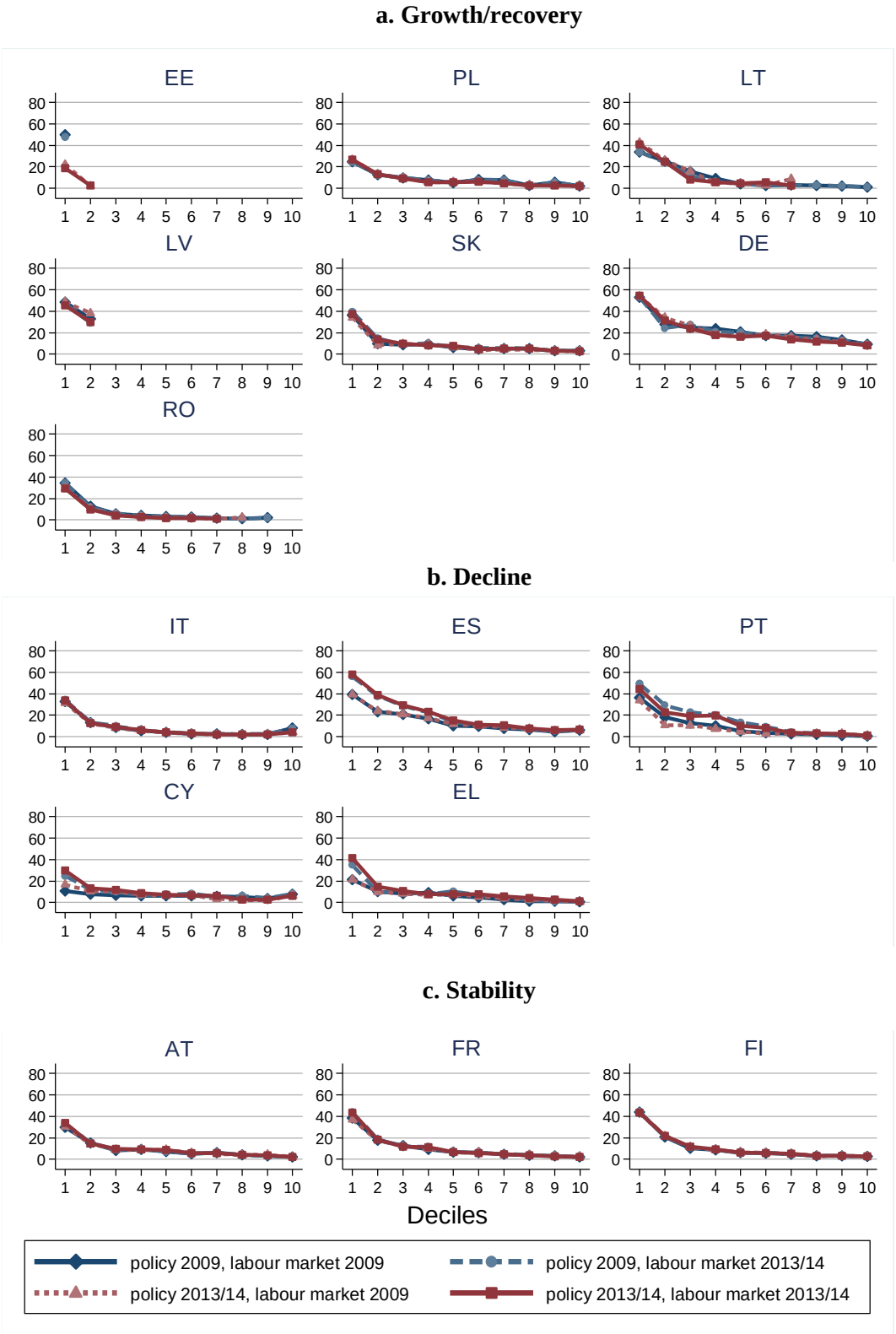


FIGURE A3.6 ITB AS FRACTION OF HOUSEHOLD GROSS INCOME (AMONG ITB RECIPIENTS) BY DECILE GROUP OF HOUSEHOLD DISPOSABLE INCOME



Notes: 1. If the sample contains less than 50 observations the estimates are not shown.
2. Blue solid line: BL; Blue dotted line: CF1; Red dotted line: CF2; Red solid line: CF3.
3. LT, ES, PT, CY, FR, FI – up to 2013; all other countries – up to 2014.

Source: EUROMOD Version G2.34.